REPORT RESUMES

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PATTERNMAKING AND DESIGN.
BY- COLICCHIO, ANTOINETTE J.
RUTGERS, THE STATE UNIV., NEW BRUNSWICK, N.J.
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SKILLS IN PATTERNMAKING ARE IMPORTANT TO ALL EMPLOYED IN THE DESIGNING ROOM IN WOMEN'S GARMENT MANUFACTURE. THE OBJECTIVE OF THIS COURSE OF STUDY IS TO ACQUAINT THE STUDENT WITH THE TOOLS AND SYMBOLS OF PATTERNMAKING AND TO HELP HIM MASTER THE BASIC FUNDAMENTALS OF PATTERN DEVELOPMENT. IT FOLLOWS THE COURSE OF STUDY APPROVED BY THE BOARD OF EDUCATION AND WAS TESTED IN VARIOUS CLASSROOMS. THEORY AND PRINCIPLES ARE COMBINED WITH PRACTICAL AND CREATIVE APPLICATION IN COSTUME DESIGN. UNITS ARE--(1) INTRODUCTION TO PATTERNMAKING AND DESIGN, (2) SLOPERS, (3) WAISTS, (4) NECKLINES, (5) CLOSINGS AND EXTENSIONS, (6) COLLARS, (7) SLEEVES, (8) SKIRTS, (9) POCKETS, AND (10) BELTS. EACH UNIT INCLUDES OBJECTIVES, RELATED INFORMATION, ASSIGNMENTS, AND ILLUSTRATIONS. THE COURSE REQUIRES THREE PERIODS PER WEEK FOR 1 1/2 YEARS. STUDENTS SHOULD BE OF HIGH SCHOOL AGE WITH APTITUDES AND GOALS FOR THE NEEDLE TRADES. THE TEACHER SHOULD BE A NEEDLE TRADES INSTRUCTOR. INCLUDED ARE OBJECTIVE AND PERFORMANCE TESTS, ILLUSTRATIONS, AND A BIBLIOGRAPHY. THIS DOCUMENT IS ALSO AVAILABLE FROM THE VOCATIONAL-TECHNICAL CURRICULUM LABORATORY, RUTGERS UNIVERSITY, 10 SEMINARY PLACE, NEW BRUNSWICK, NEW JERSEY 08903, FOR $2.00. (MS)

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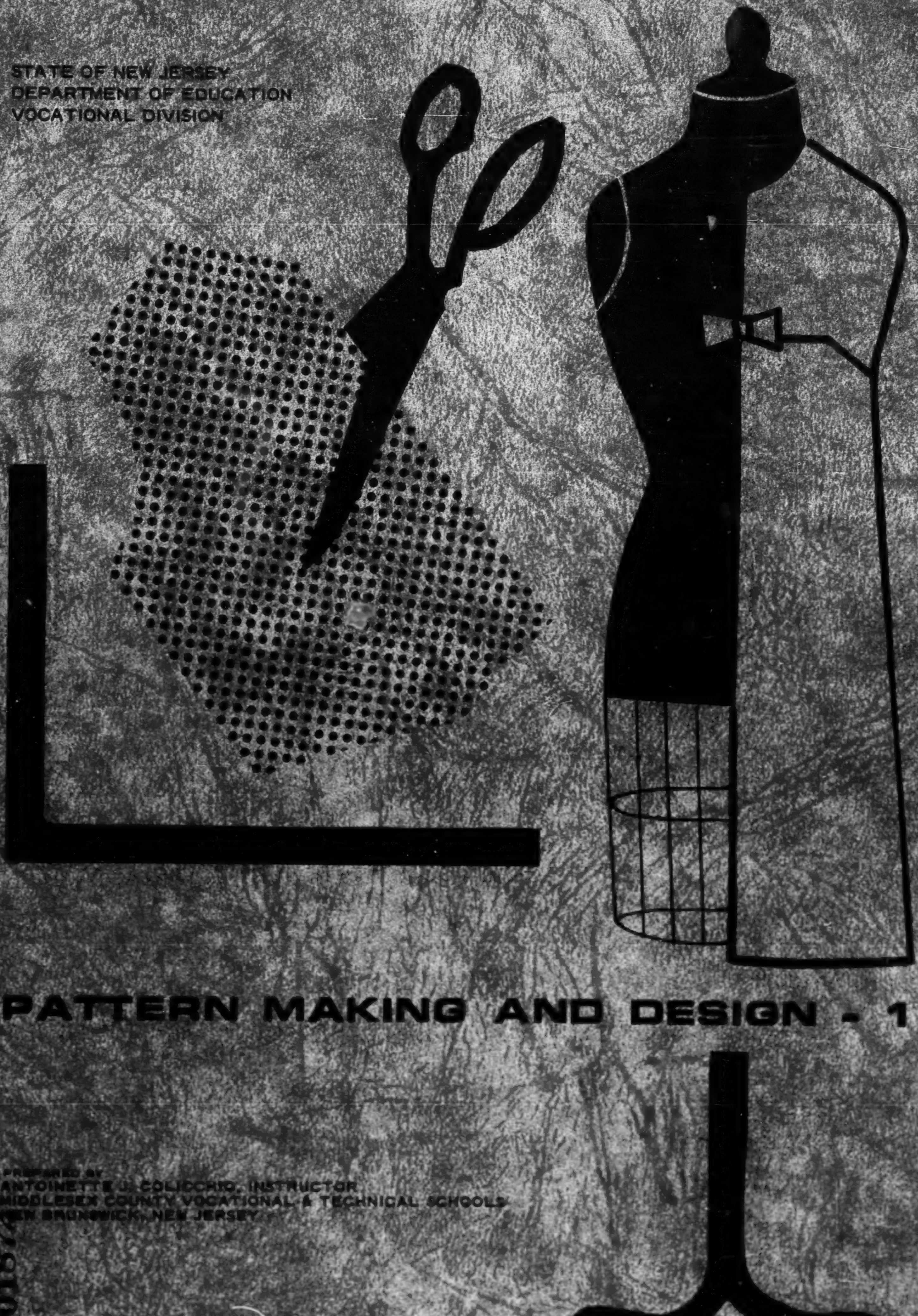

PATTERN MAKING AND DESIGN - 1

PREPARED BY
ANTOINETTE J. COLICCHIO, INSTRUCTOR
MIDDLESEX COUNTY VOCATIONAL & TECHNICAL SCHOOLS
NEW BRUNSWICK, NEW JERSEY

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PATTERNMAKING AND DESIGN

Prepared by
ANTOINETTE J. COLICCHIO

BURR D. COE, Director

Middlesex County Vocational and Technical High Schools
New Brunswick, New Jersey

Vocational-Technical Curriculum Laboratory
Rutgers · The State University
10 Seminary Place
New Brunswick, New Jersey

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INTRODUCTION

The fashion field, encompassing both wholesale and custom manufacturing, has a diversity of jobs ranging from the designer to the operator. Students in the dressmaking and design course are trained not only to be proficient in the operating of sewing machines and the constructing of garments, but also to have an understanding of patternmaking relating to women's garments.

Job opportunities in the designing room are many, and the skills needed for patternmaking are important to all employed in the designing room, from the designer to the patternmaker and the pattern grader. Most manufacturing firms today show at least four "lines" a year and expect as many as 40 to 60 designs developed in the designing room for each line. To meet the need for the quick development of patterns, the manufacturers use either the method of draping or of flat patternmaking, or a combination of both, depending upon the style features of the garment. The work covered in the basic year by this book deals with flat patternmaking only.

In the first year of patternmaking, the student will use a "sloper" or block pattern, the device used to develop patterns quickly. For ease of handling, it is suggested that a $\frac{1}{4}$-scale sloper be used for each lesson; however, where the patterns are intricate, the text will specify that they be developed in full scale and tested in muslin for line, proportion, and fit.

It is the objective of the book to acquaint the student with the tools and symbols of patternmaking and to help the student attain the mastery of the basic fundamentals of the development of patterns. The student will (1) learn the value of precision in garment design and construction; (2) put into practical use the principles of costume design; and (3) be given the opportunity to develop creative ability in the styling and development of original designs.

Within all areas of instruction, students should keep a notebook. This notebook should be a compilation of all lecture notes and all assignments in written and illustrated form.

Note to Teacher:
It is important that students be required to keep a notebook of all notes and assignments. At the first lesson, they should be instructed to purchase a loose-leaf notebook for this purpose.

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UNIT I - INTRODUCTION TO PATTERNMAKING AND DESIGN

A. Markings, Symbols, and Terms Used in Patternmaking

Review of Dressmaking Terms — Lesson 1

OBJECTIVE: To review dressmaking terms that will aid the student in flat patternmaking.

RELATED INFORMATION:

Before starting on the interesting and intricate skills required for the development of patterns, it is important to become familiar with the language of fashion as related to patternmaking.

Since you have spent some time in the sewing of garments, many of the dressmaking terms are familiar to you, and you will meet them again as you progress in patternmaking. However, a review of these terms will simplify many of your assignments.

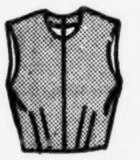


Fig. 1

WAIST - garment or part of garment covering the body from the shoulder to waistline. Usually called blouse or bodice (Fig. 1).

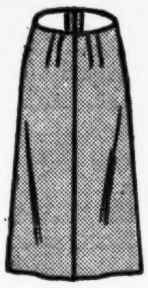


Fig. 2

SKIRT - part of any garment--coat, dress, etc. --that hangs below the waist. Length varies with fashion (Fig. 2).

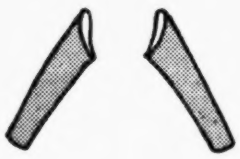


Fig. 3

SLEEVE - part of garment covering the arm.

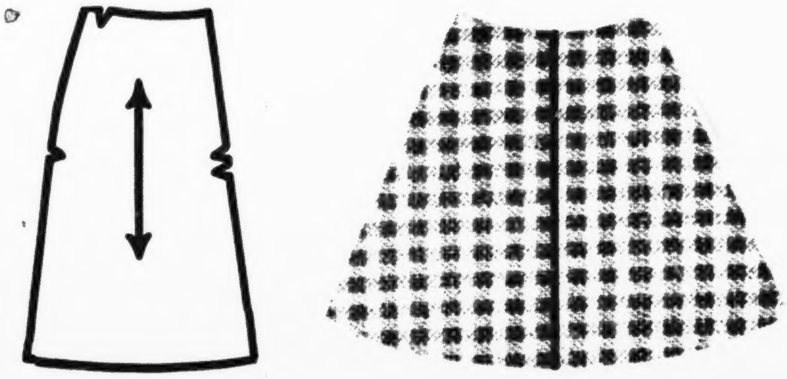


Fig. 4

GORE - shaped set-in section, extending in skirt from waistline to hem. Patterns of skirts are made up of gores. (Fig. 4.)

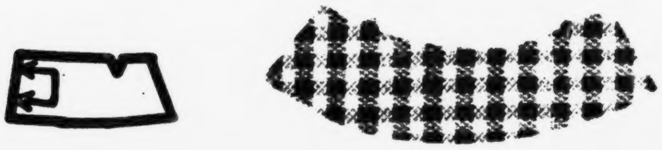


Fig. 5

COLLAR - article of dress, separate or attached to garment, worn around the neck. (Fig. 5.)

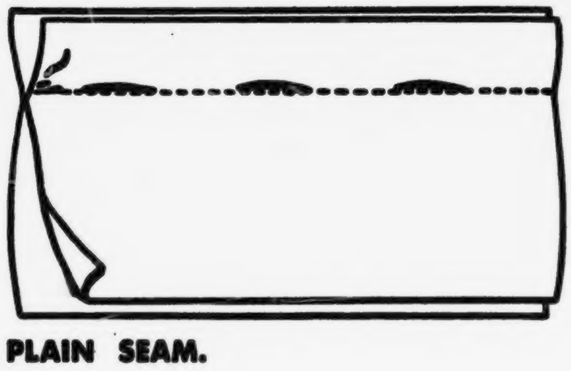


Fig. 6

SEAM - the sewing of two or more pieces of fabric together (raw edges placed together and notches matching), varying in depth from 1/8" to 1½". (Fig. 6.)

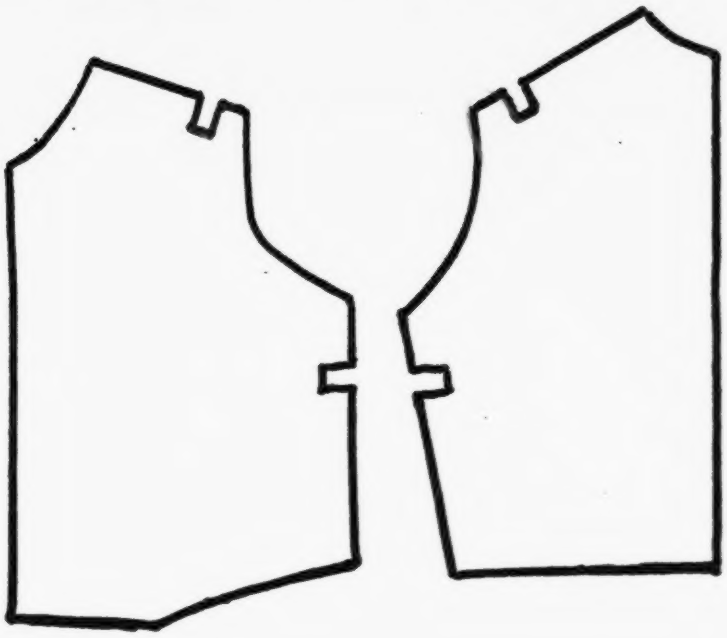


Fig. 7

NOTCH - a more or less angular cut in the seam of a garment piece, used for matching corresponding parts when stitching. (Fig. 7.)

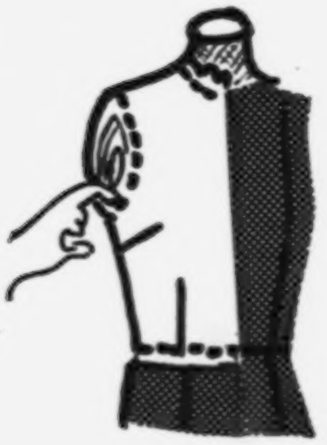


Fig. 8

EASE - the extra amount of material a designer leaves beyond the body measure at any given point. This amount varies with the type of garment, fashion, trends, and fabric. (The looseness or tightness of the garment.) Fig. 8.)

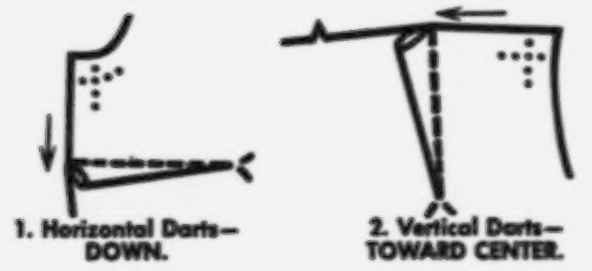

1. Horizontal Darts—DOWN.
2. Vertical Darts—TOWARD CENTER.

Fig. 9

DART - shaped tuck taken to fit garment to the figure; as the waistline dart, hip dart, shoulder dart, etc. (Fig. 9.)

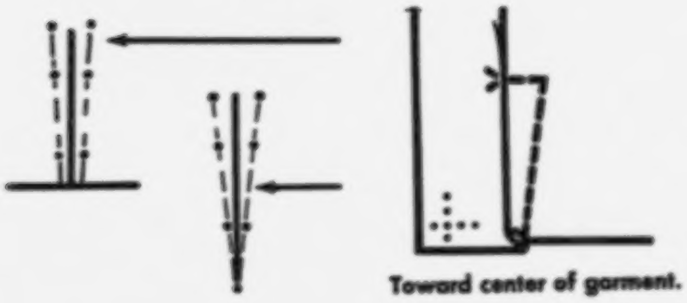

Toward center of garment.

Fig. 10

DART-TUCK --(or released dart) an inverted dart with fullness released within the garment. (Fig. 10.)

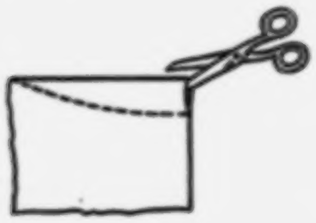


Fig. 11

SLASH - to cut open. A curve dart is slashed open through the fold edge after stitching so it will lie flat. The opening in a long sleeve is slashed between the stitching lines. (Fig. 11.)

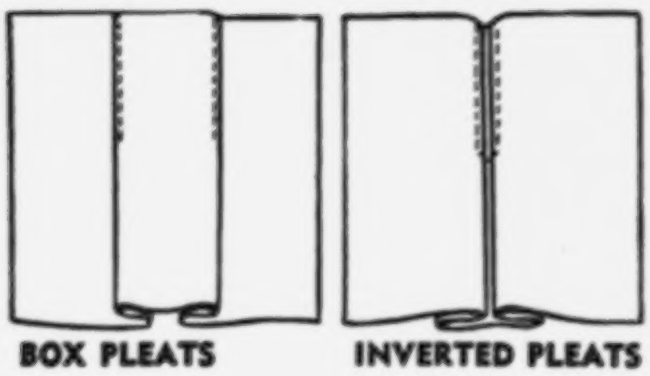
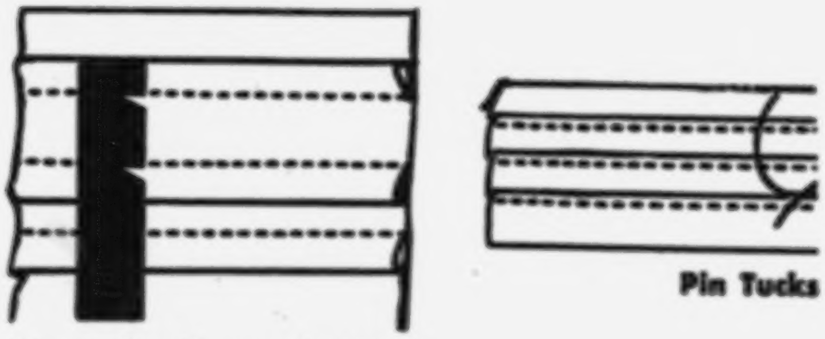

BOX PLEATS
INVERTED PLEATS

Fig. 12

PLEAT - a fold in the fabric that releases fullness. (Fig. 12.)

TUCK - a stitched fold in the cloth for the purpose of trimming or decoration. (Fig. 13.)



Measuring Gauge for Tucks

Pin Tucks

Fig. 13

ASSIGNMENT:

Study the terms and duplicate the following, using fabric:

1. Darts:
    - a. 5" long, using $\frac{3}{4}$" of material at the top of the dart.
    - b. 2$\frac{1}{2}$" long, using $\frac{3}{8}$" at the top of the dart.
2. Dart-tucks:
    - a. 2$\frac{1}{4}$" long, using 1" of fabric in width.
    - b. 2$\frac{3}{4}$" long, using $\frac{3}{4}$" of fabric in width.
3. Gathers:

    Using a sheer fabric and a ratio of 3:1.
4. Seams:
    - a. $\frac{1}{4}$"
    - b. $\frac{3}{8}$"
    - c. $\frac{5}{8}$"
    - d. $\frac{3}{4}$"
5. Tucks:
    - a. $\frac{1}{4}$" tuck with $\frac{1}{4}$" space.
    - b. $\frac{1}{2}$" tuck with $\frac{1}{4}$" space.
6. Pleats:
    - a. six 1" pleats with $\frac{3}{4}$" underlay
    - b. four $\frac{3}{4}$" pleats with a $\frac{3}{4}$" underlay.

UNIT I - INTRODUCTION TO PATTERNMAKING AND DESIGN

A. Markings, Symbols, and Terms Used in Patternmaking

Review of Fabric Terms — **Lesson 2**

OBJECTIVE: To review basic fabric terms that are common in patternmaking.

RELATED INFORMATION:

Along with dressmaking terms there are certain basic fabric terms that will be used constantly throughout your lessons in patternmaking. The meanings of these terms should be clearly understood and be a working part of your vocabulary.

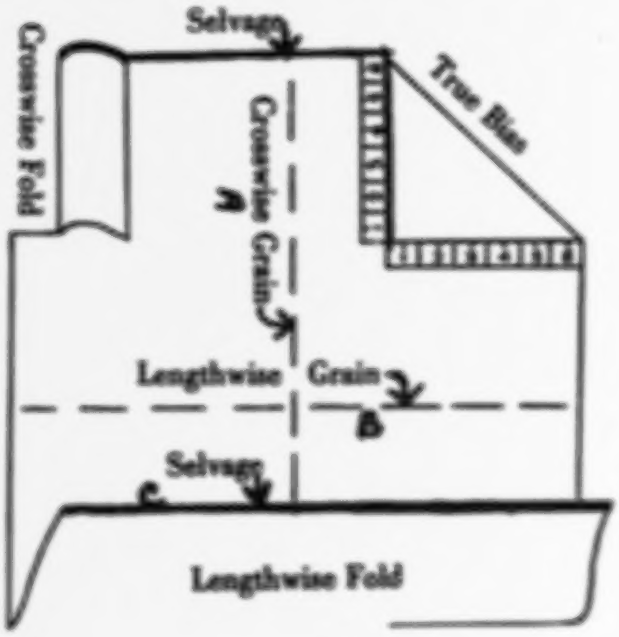


Fig. 14

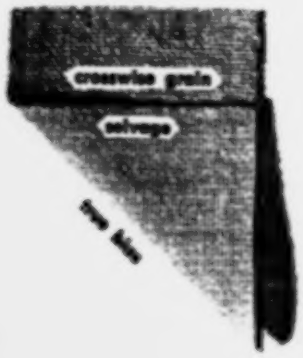
GRAIN - direction of warp and woof threads in fabric; as, the lengthwise or crosswise grain. (Fig. 14.)

CROSSWISE THREADS - woof or filling threads.

Refers to the threads running at right angles to the selvage. These threads are slightly weaker than the lengthwise threads and are used for the "straight-of-goods" only when maximum strength is not required, or when crosswise stripes are featured in the design. (Fig. 14-A).

LENGTHWISE THREADS - warp threads - the threads running parallel to the selvage. As a rule, the lengthwise threads are stronger than the crosswise threads, and for this reason garments are cut in such a way that the lengthwise threads run lengthwise on the body. (Fig. 14-B.)

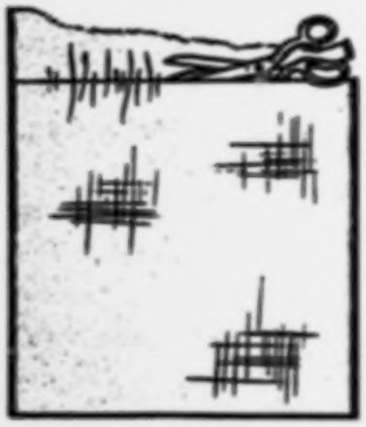
SELVAGE - the finished edge of the fabric that is woven with stronger threads. There is selvage on both lengthwise edges of the fabric. (Fig.14-C.)



BIAS - any diagonal line on the fabric is a bias, and the fabric will stretch somewhat along that line. True bias is the diagonal of a perfect square of the fabric. (Fig. 15.)

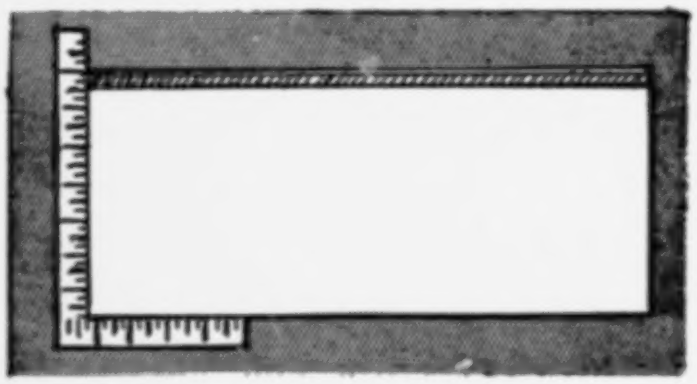
Fig. 15

SQUARING FABRIC - checking the fabric to be sure it is grain perfect. To do this, straighten ends (Fig. 16) and fold fabric in half lengthwise (Fig. 17). Pin edges together and selvages together. If the fabric lies smooth on the table and forms a right angle at the crosswise and selvage ends (test with a T-square), it is straight or squared.



To Straighten End

Fig. 16

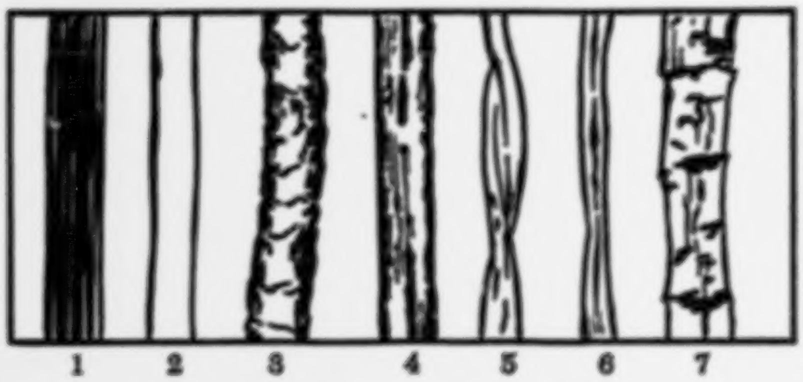


GRAIN PERFECT FOR CUTTING

Fig. 17

HAND - texture or feel of cloth, said especially of silk. Fabric of quality has a good hand, meaning that you can feel the quality or that it will work well in the making.

FIBERS - threads or filaments to be spun or woven in making textiles. Fabric fibers include silk, wool, cotton, linen, rayon, Arnel, Estron, Dacron, Acrilan; classified as animal, vegetable, mineral, and synthetic or man-made. (Fig. 18.)



Microscopic Views of Natural Fibers

1. Wild Silk; 2. Cultivated Silk; 3. Wool; 4. Hair (alpaca); 5. Unmercerized Cotton; 6. Mercerized Cotton; 7. Flax

Fig. 18

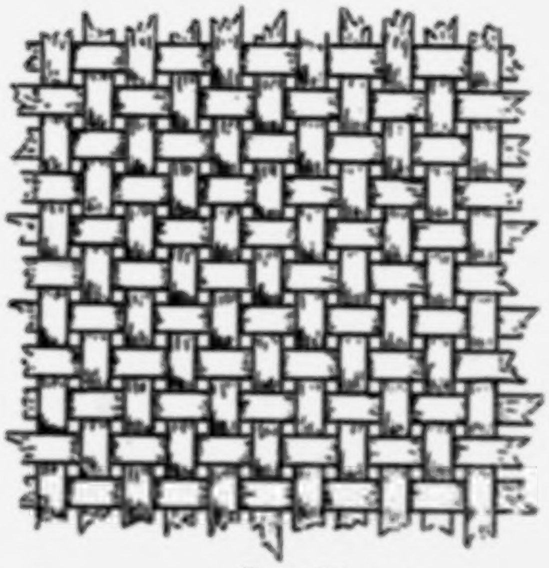


Fig. 19

PLAIN WEAVE - the simplest weave, in which each filling yarn passes successively over and under each warp yarn to form an even surface. (Fig. 19.)

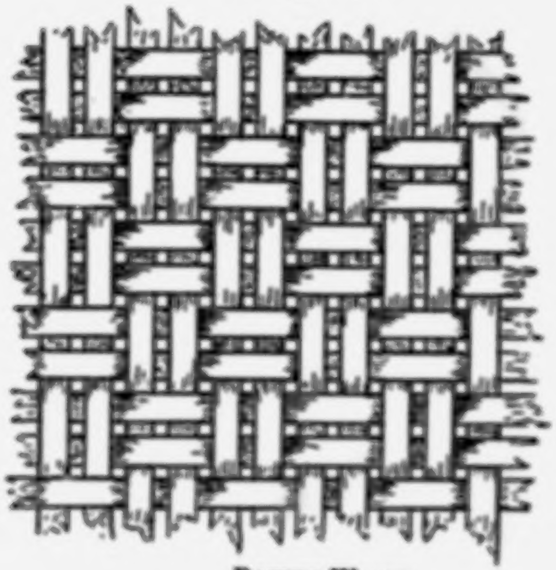


Fig. 20

BASKET WEAVE - a variation of the plain weave. Two or more yarns in both warp and filling directions are woven together as one yarn. (Fig. 20.)

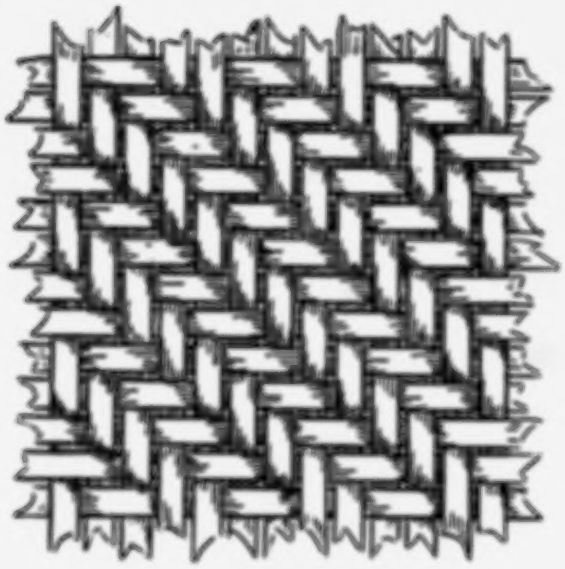
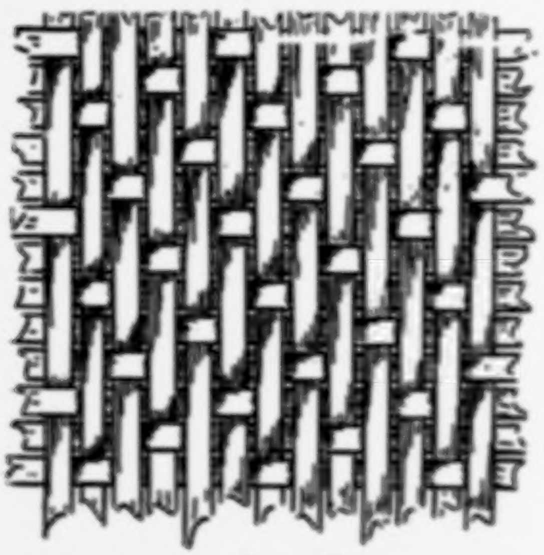


Fig. 21

TWILL WEAVE - a weave which produces a diagonal line in the cloth. Strongest of all weaves. (Fig. 21.)



SATIN WEAVE

Fig. 22

SATIN WEAVE - an irregular weave with few interlacings and long floats. Either the warp or the filling yarns pass over a number of yarns of the other set before interweaving, forming a smooth, unbroken, lustrous surface. (Fig. 22.)

ASSIGNMENT:

1. Using a piece of fabric (6" x 8") with a selvage edge,
    a. Mark lengthwise grain
    b. Mark crosswise grain
    c. Mark off true bias

2. Cut a 6" x 6" square and test for shrinkage, using the following fabrics:
    a. wool
    b. cotton broadcloth
    c. linen
    d. dacron-cotton
    e. checked cotton gingham

3. List six fabrics that you think have the hand needed for flowing formal or semiformal dresses. Include fiber content, weave and finish. Obtain samples of these fabrics to include in your notebook.

4. Obtain samples (eleven in all) of fabrics that use the following weaves:
    a. four of plain weave
    b. three of basket weave
    c. two of twill weave
    d. two of satin weave

UNIT I - INTRODUCTION TO PATTERNMAKING AND DESIGN

A. Markings, Symbols, and Terms Used in Patternmaking

Line and Drawing Terms — Lesson 3

OBJECTIVES: To learn how line and shape may be used to produce a pleasing design.
To learn specific drawing terms used in patternmaking.

RELATED INFORMATION:

Line is the style, outline, or effect, regardless of the textile used, given by the cut of a garment. Lines are affected in the garment not by conspicuous seams alone, but by the edges of all parts such as pockets, collars, lapels, tiers, darts, tucks, and pleats, and by folds such as gathers, unpressed pleats, or draping. Stitching, embroidery, braid, or other types of trimmings are also used in the creation of line.

In dressmaking and design, the selection of correct color and fabric is second to the choice of good lines for the development of an original pattern. In order to determine what effect the lines of a garment will have on the figure, one must understand what the direction of a line is and its effect upon shape.

Lines may be straight, curved, or irregular; their direction is expressed as horizontal, vertical, or oblique. The type of line you should use will depend on what you want to express, for each has its own definite characteristic and subtly produces a definite effect.

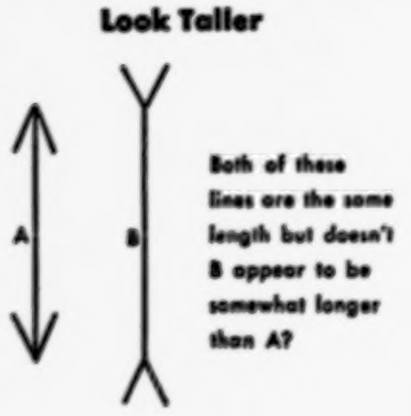
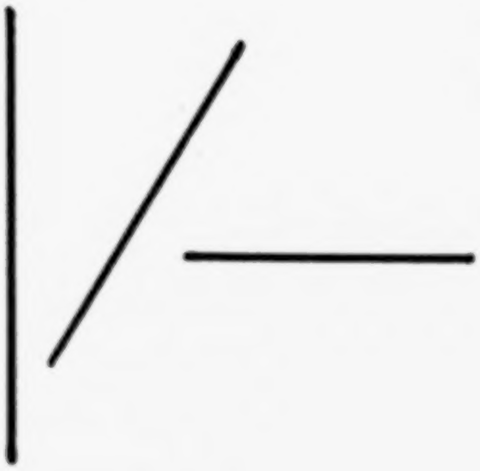

Look Taller
A
B
Both of these lines are the same length but doesn't B appear to be somewhat longer than A?

Fig. 23

Line illusion - a vision that is not true, a false impression, a deceptive appearance, created by the use of lines. (Fig. 23.)



Straight lines give a feeling of dignity. They are direct, obvious, and tend to make one look more sophisticated. (Fig. 24.)

Fig. 24

Curved lines create an illusion of softness and grace and add roundness to the figure. Their presence in a costume adds a gentle, feminine feeling to a design. (Fig. 25.)

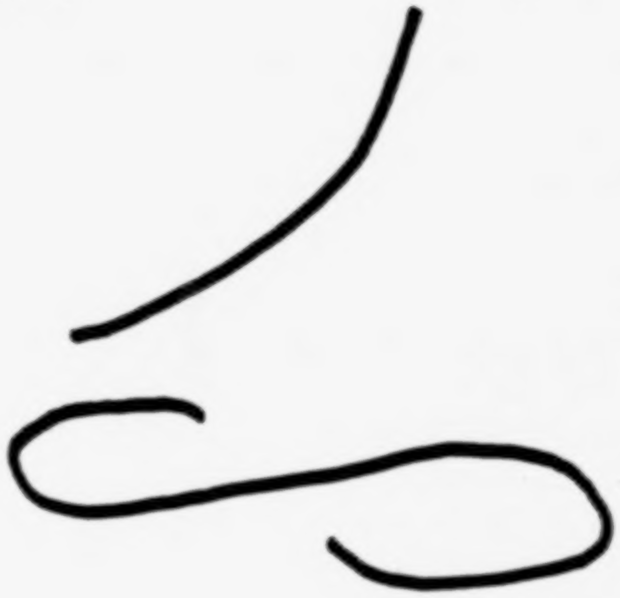


Fig. 25

Vertical lines are exactly upright and suggest dignity and strength. By directing the eye up and down the figure, they tend to increase the apparent height of the wearer and thus slenderize the figure. (Fig. 26.)

Fig. 26

Horizontal lines are parallel to the horizon, extending from left to right. Any line running horizontally across the figure, or any device with horizontal movement adds width to the figure where it falls, and also decreases apparent height. The horizontal line suggests rest, placidity, or repose. (Fig. 27.)

Fig. 27

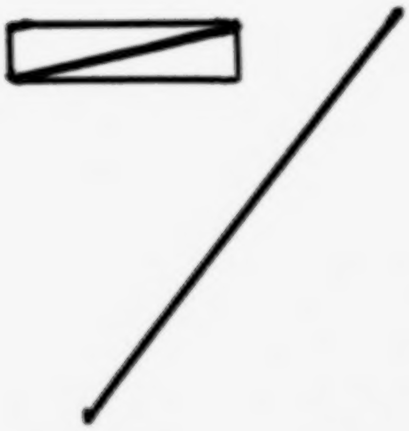


Fig. 28

Diagonal lines are slanting or oblique lines going from corner to corner. Diagonal lines are very dashing in their movement and suggest active grace. They lend much interest to design and if strategically placed in the garment, give much the same illusion as either vertical or horizontal lines. Diagonal lines can therefore be used to give either a vertical or a horizontal influence. (Fig. 28.)

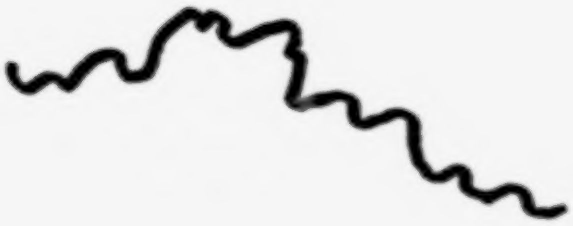


Fig. 29

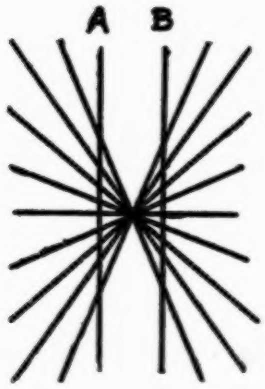
Irregular lines produce some desired effects, but as a rule they lack harmony and grace. They are indecisive and show no strength. A design of broken lines can be considered an irregular line. (Fig. 29.)

Fig. 30

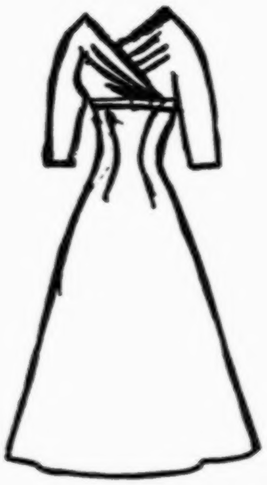
Thin lines, whether vertical, horizontal or diagonal, curved or round, are dainty and light and can be used to advantage when designing for gay or petite types. (Fig. 30.)

Fig. 31

Thick lines are heavy, massive, and ponderous. They should be used with care and only when the idea you wish to express in the design is that of weight or massiveness. (Fig. 31.)



Are the vertical lines A and B straight or do they bulge in the middle? They are actually straight, but the lines radiating from the center make them seem to bulge. Fullness concentrated in one spot will make the figure look fuller at that spot.

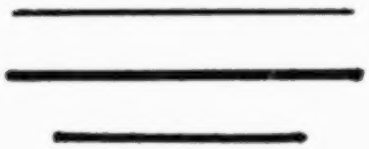


Radiating lines, if skillfully used, will create much interest in design. They add width at the outer points and minimize width at the point from which they radiate. They express vigor, strength, and vitality. (Fig. 32.)

Fig. 32

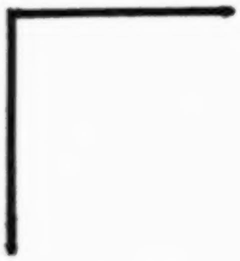
Along with understanding the relation of line to shape, it is important to know the direction of these lines when making patterns.

Following are additional drawing terms you should study.



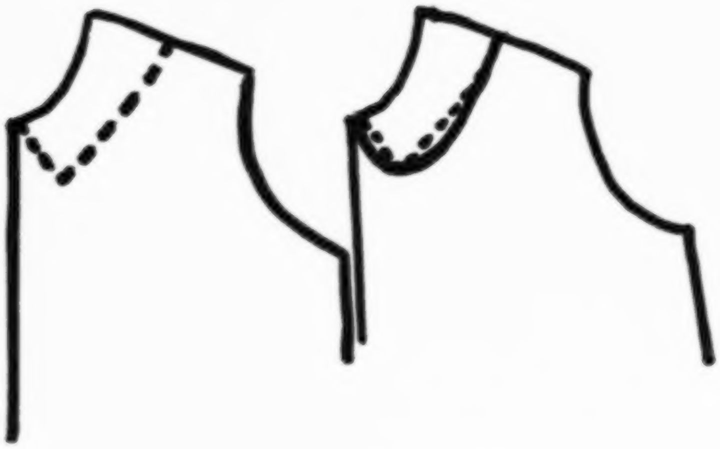
Parallel - having the same direction but never meeting no matter how far extended. (Fig. 33.)

Fig. 33



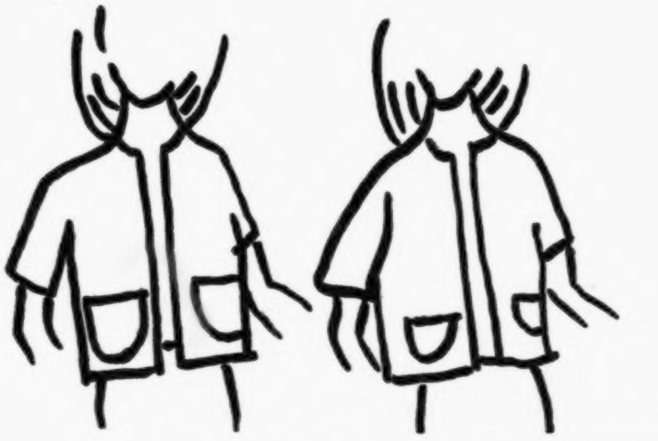
Right angle - a corner formed when a vertical and a horizontal line meet. (Fig. 34.)

Fig. 34



Blending - creating one smooth line from many lines. (Fig. 35.)

Fig. 35



Pockets too big Pockets in good proportion

Fig. 36

Proportion - comparative relation in size, symmetry, or balance. (Fig. 36.)

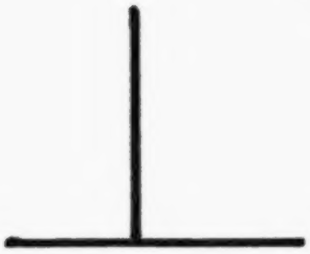


Fig. 37

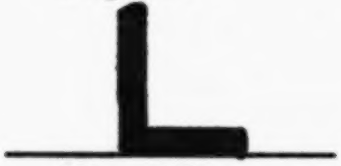
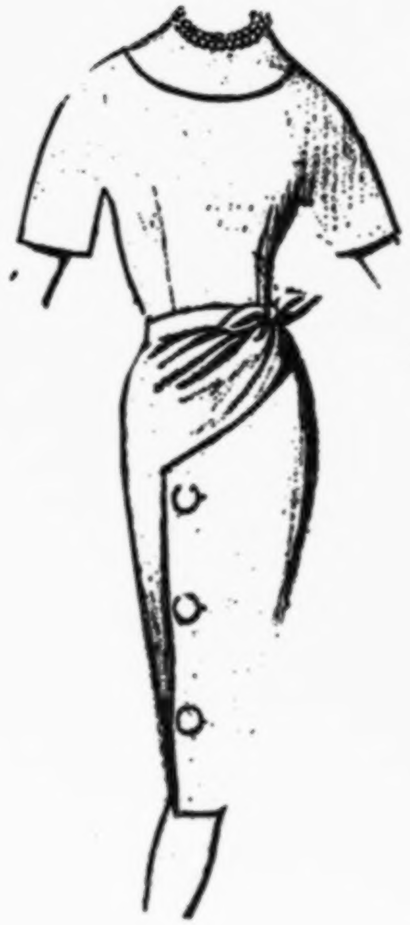


Fig. 38

Perpendicular - a line at right angles to another line or surface. (Fig. 37.)

Square-over - the term applies to the act of laying one arm of the tailor's square along a given line and then marking along the other arm of the tailor's square to obtain lines at a perfect right angle. This action is indicated on pattern drafts by the symbol shown in Fig. 38.



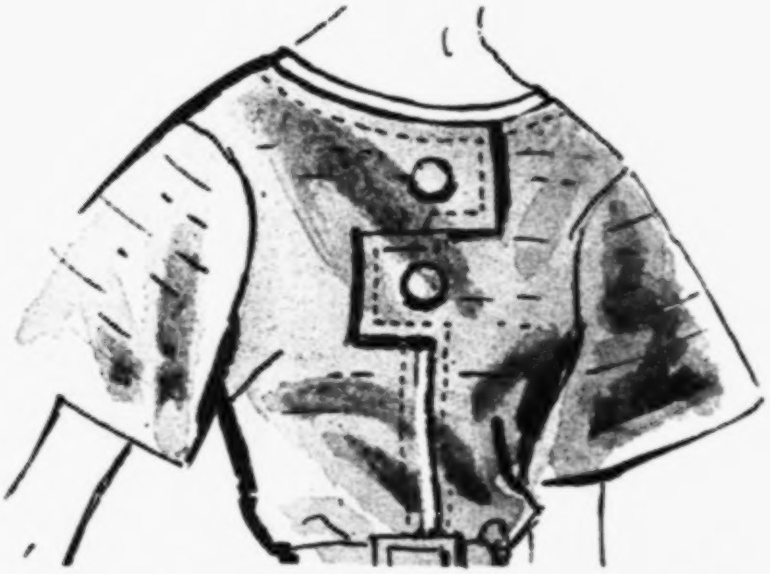


Fig. 39

Center of interest - an outstanding feature of the garment, as a side drape or a pocket interestingly placed on a garment. (Fig. 39.)

ASSIGNMENT:

1. Using pattern books or newspapers, find examples of

   a. three blouse designs featuring vertical lines
   b. three skirt designs featuring horizontal lines
   c. three dress designs featuring curved lines

2. Find a good example of a dress design that is particularly well suited to

   a. a tall, thin girl
   b. a short, slender girl
   c. a short, plump girl
   d. a girl with narrow hips

3. Find two pictures of dresses, one showing good and one showing bad proportions.

4. Select five pictures of dresses that have a pleasing center of interest.

5. Trace six copies of Fig. 40 and develop each into an original design, using interesting arrangements of lines.

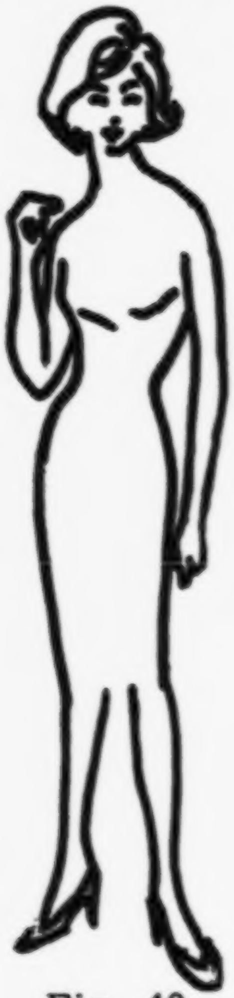


Fig. 40

UNIT I - INTRODUCTION TO PATTERNMAKING AND DESIGN

A. Markings, Symbols, and Terms Used in Patternmaking

Patternmaking Symbols Lesson 4

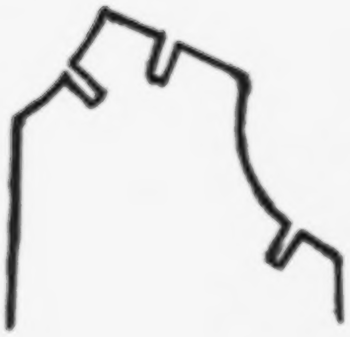
OBJECTIVES: To learn the marking symbols important to all patternmaking.
To understand the cost to industry if markings are omitted.

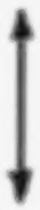
RELATED INFORMATION:

In the garment trade, whether it is in the manufacturing of clothing or the production of patterns, it often happens that the patternmaker does not work jointly with the cutter and sample maker (operator). Therefore, it is important that standard markings be readily recognized and that no marking symbols be omitted from the completed pattern. The cutter must be able to lay out the pattern pieces without any doubt in his mind as to number of pieces of each to be cut, grain lines, etc. The operator, in turn, must make up the sample garment using notches and other tracings as her only guide.

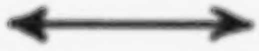
Patterns made to be used by people other than the patternmaker require more specific and accurate aids. Symbols serve as a carrier of directions or reminders from designer to patternmaker to operator.

Certain construction lines need to be marked or have perforations punched on patterns. Following are a few of the standard symbols for these construction lines:

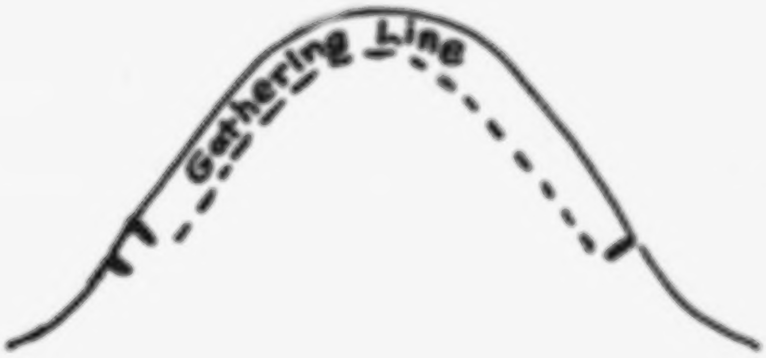
C. F.	Center-front
C. B.	Center-back
●	Perforation used to mark inside end of darts, pocket placement, trimming placement
	Notch - an indentation in the pattern used as a guide for matching two pattern pieces. A notch is also used to indicate fold lines for pleats, matching lines at seamline for darts, etc.



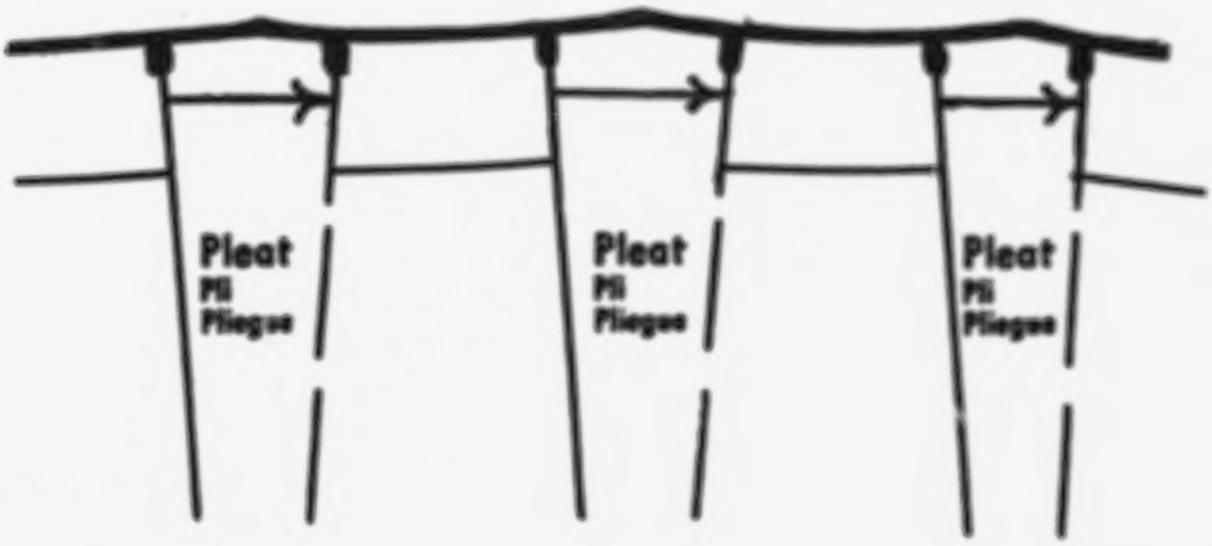
Grainline marking - cut on lengthwise grain



Grainline marking - cut on crosswise grain


Gathering Line

Marking for gathers - gather between notches


Pleat
Pli
Pliegue
Pleat
Pli
Pliegue
Pleat
Pli
Pliegue

Markings for pleats - fold one notch to meet second notch in the direction of the arrow

Each pattern piece must be labeled as to grain, name of pattern piece, size, style number, and the number of pieces to be cut.

Following are examples of this:

		Interpretation
#213	12/1	Style #213, size 12, cut 1 piece
#103	16/2	Style #103, size 16, cut two
#405	6/4	Style #405, size 6, cut four

Although all pieces for the first pattern for a garment will be marked as to the number of pieces needed, when the final oaktag pattern is made there will be a separate pattern for each of the pieces needed to make the complete garment. This is to simplify the layout or "marker" for cutting. All material is placed opened to the full width on the table. No pattern piece is placed on the fold of fabric. Separate pattern pieces will be made for linings, interfacings, or interlinings.

If just one of the above symbols is omitted, there can be utter confusion, loss of time, or waste of fabric. This is one of the most important phases in patternmaking. In marking the pattern pieces, the patternmaker must take time to check all adjoining seams for accuracy of length, correct notching, and matching of centers.

ASSIGNMENT:

1. Working with the sketches below, list the pattern pieces needed to make each garment. (Fig. 41.)
    a. Style #
    b. Name of pattern piece
    c. No. of pieces needed

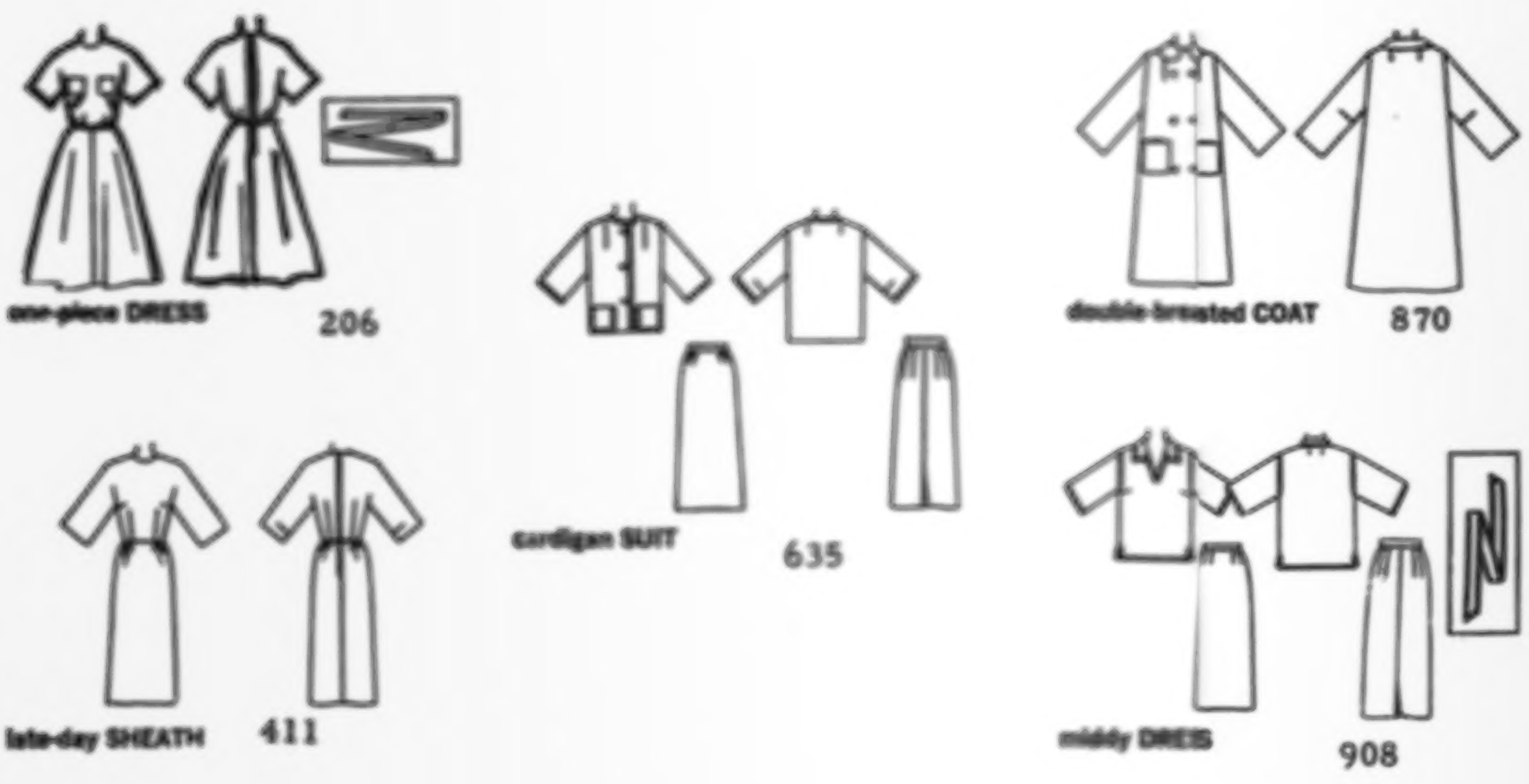


Fig. 41

2. Sketched below (Fig. 42) are a few pattern pieces with certain marking symbols omitted. Fill in all of the markings omitted.

Fig. 42

3. Collect five pictures of different garments (back and front views). Exchange the pictures with one of the other students in the class. For each picture you received, list the names of all pattern pieces and the number of pieces of each needed to construct the garment.

UNIT I - INTRODUCTION TO PATTERNMAKING AND DESIGN

B. Tools and Equipment

Tools for Measuring Lesson 5

OBJECTIVES: To review the use of measuring tools used in dressmaking.
To learn the importance of accurate measurement.

RELATED INFORMATION:

To do a job well in any field requires the use of the proper tools. Therefore before starting on the exacting work required for patternmaking, one must get together all necessary tools and supplies needed. Accurate measurement is absolutely necessary for good trade workmanship, and to do this one must use the proper measuring tools for each specific purpose.

The tape measure is used constantly to measure lengths over irregular, curved, and also straight surfaces. Tape measures come in various lengths. The one most commonly used by the garment industry is made of strong material that does not stretch. In your selection of a tape measure, be sure it has metal ends and is numbered on both sides, with the numbers going in opposite directions.

Due to the structural lines of the body, it is necessary to use a tool for measuring which will curve with these lines. Therefore, a cloth tape measure is the only measuring device that can answer the purpose.

A 6- or 12-inch ruler will be very helpful in the measuring of seam allowances, hems, facings, tucks, trimmings, etc. A ruler made of transparent plastic is easier to use than one made of wood or metal.

A yardstick, a measuring stick that is 36 inches long, is used for measuring material, for marking long straight lines, and for checking grain line of pattern to fabric.

ASSIGNMENT:

1. Record the following measurements for the dress forms used in your dressmaking classes: (a) bust, (b) waist, (c) hips, (d) back length of waist (base of neck to waistline), (e) shoulder (neck to armhole), (f) front length of waist (base of neck to waist). Make up a chart, using the following sample.

Fig. Size	Bust	Waist	Hips	Back Length	Shoulder	Front Length

2. Using the measurement charts in one of the pattern books in the dressmaking rooms, compare the measurements with those above. Using the sample chart below, show all the differences in measurements.

	Dress Form Size	Pattern Book Size	Differences in Measurements
Bust			
Waist			
Hips- 7" below waist			
Back length			
Front length			
Shoulder			

3. Working with a partner in the class, record the measurements listed in Question 2 for each other.

UNIT I - INTRODUCTION TO PATTERNMAKING AND DESIGN

B. Tools and Equipment

Tools for Marking and Cutting — Lesson 6

OBJECTIVE: To become familiar with the tools needed for marking and cutting.

RELATED INFORMATION:

In pattern designing, all pattern pieces are developed without seams, facings and hems until the last step. To complete a pattern, seams, grain, darts, hems, and other construction features are marked in some way. To accomplish this, a few special tools can be purchased at an art store or any dressmaker's supply house. The following tools are a few that the patternmaker uses and that you will be using for your assignments.

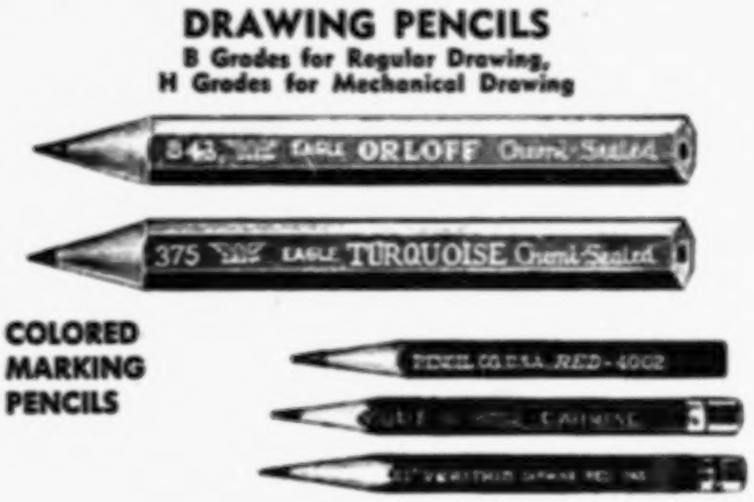

DRAWING PENCILS
B Grades for Regular Drawing,
H Grades for Mechanical Drawing
843 EAGLE ORLOFF Chemi-Sealed
375 EAGLE TURQUOISE Chemi-Sealed
COLORED MARKING PENCILS
RED-4002
CARMINE

Fig. 45

Several pencils (medium-soft lead), sharpened to fine points. A red and blue pencil. (Fig. 45.)

Fig. 46

Eraser - Art gum is the best eraser for use in drawing. (Fig. 46.)

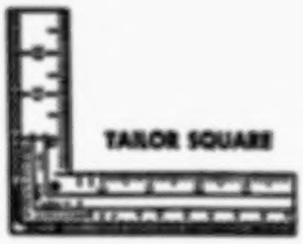


Fig. 47

A tailor's square - a two-sided or L-shaped ruler. This square has a long arm and a short arm, marked with inches on one side and a scale on the other side. The two arms are joined together to form a perfect right angle. (Fig. 47.)

Your tailor's square will be much easier to use if you always work with its long arm away from you. You will find it more convenient for drawing if you accustom yourself to holding your square in your left hand and your pencil in your right hand.

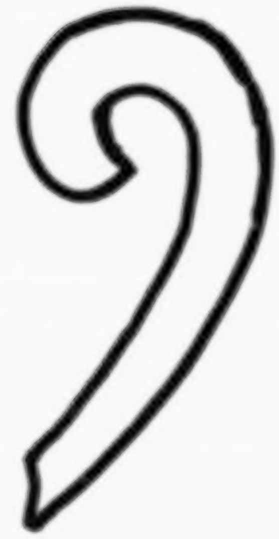


Fig. 48

Dietzgen #17 transparent curve - used for armholes and neckline. (Fig. 48.)

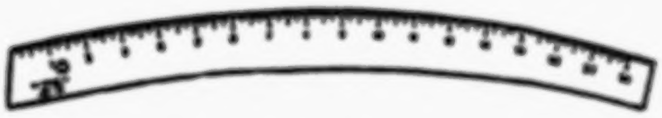


Fig. 49

Curved ruler, sometimes called a curved stick. It is used for more flowing curves on hiplines and skirt hems. The curved stick is marked in inches so that a good curve between certain inches on one hip may be repeated on the other hip. (Fig. 49.)

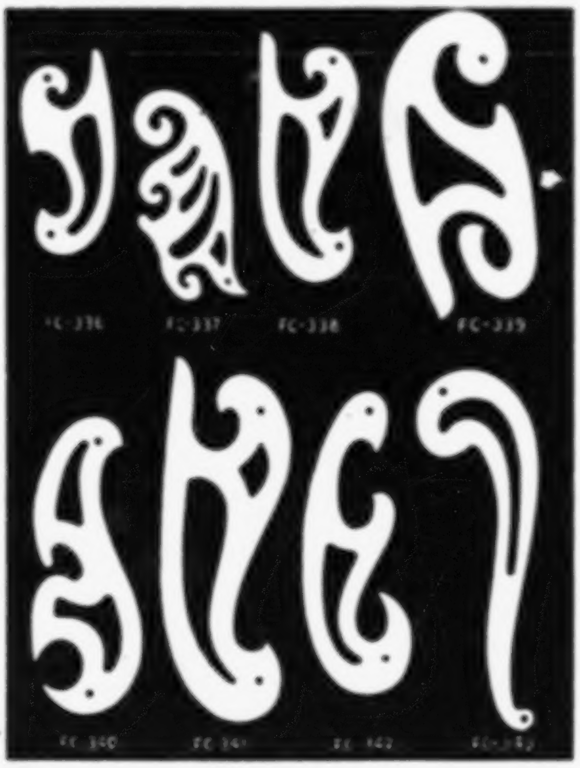


Fig. 50

French curves - for any additional curves and shapes you may want to use in your design. (Fig. 50.)

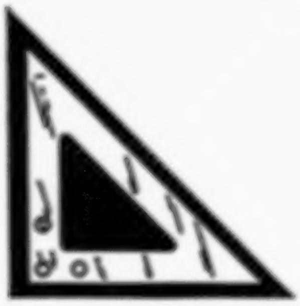


Fig. 51

Transparent 45-degree triangle - excellent for squaring corners. (Fig. 51.)

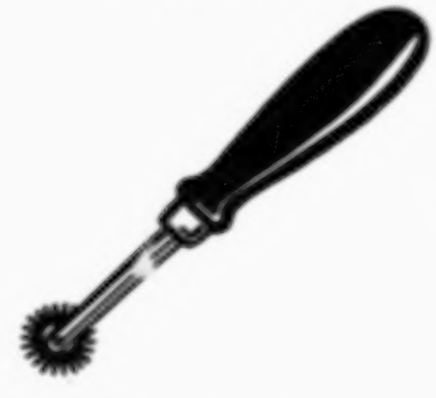


Fig. 52

Tracing wheel - a tool, usually made of nickel-plated steel with a wooden handle, with sharp teeth to form perforations. It is important to trace with a very smooth line; you should trace away from the body. (Fig. 52.)

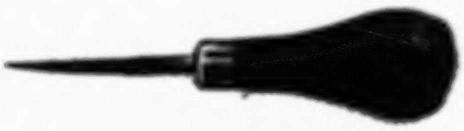


Fig. 53

Awl - used for piercing small round holes in patterns to mark ends of darts, pocket positions, and trimmings. (Fig. 53.)

In quantity production, a powered hot drill is used for marking these positions on the fabric. (Fig. 54.)

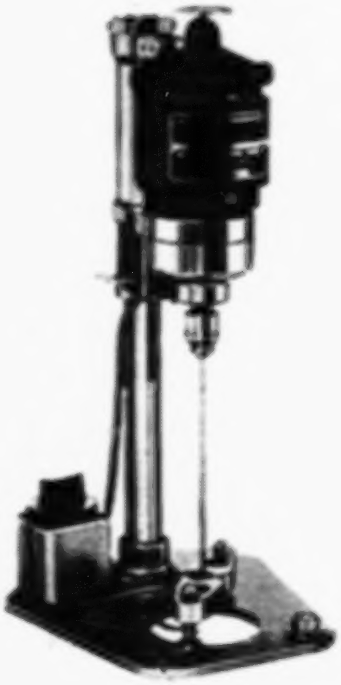


Fig. 54

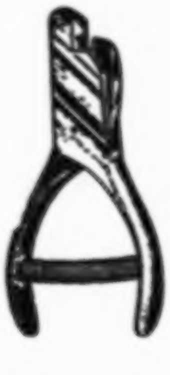


Fig. 55

Notcher - a device for cutting notches in final pattern. It cuts out a piece of the paper perpendicular to the edge, $\frac{1}{4}$ inch deep and $\frac{1}{16}$ inch wide. Saves time, and each pattern notch is absolutely uniform. Fig. 55.)

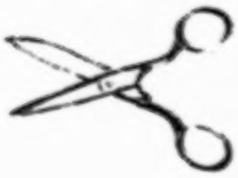


Fig. 56

Small scissors for cutting paper. Must be sharp so that all final lines will be even and exact. (Fig. 56.)

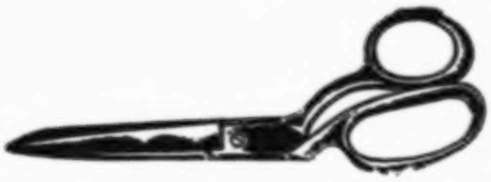


Fig. 57

Large shears for cutting muslin or other fabric to be used for testing patterns. (Fig. 57.)

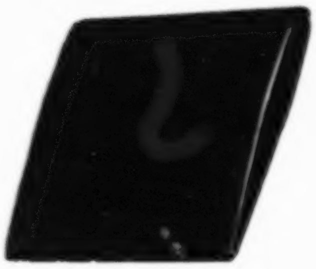


Fig. 58

Tailor's marking chalk or French crayon is used to make clear, strong markings when fitting muslin on dress forms. (Fig. 58.)

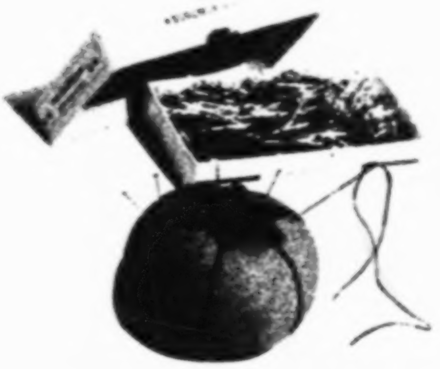


Fig. 59

Pins - $\frac{1}{2}$ pound box of dressmaker pins; size 17 for fitting muslin and pinning patterns together. (Fig. 59.)

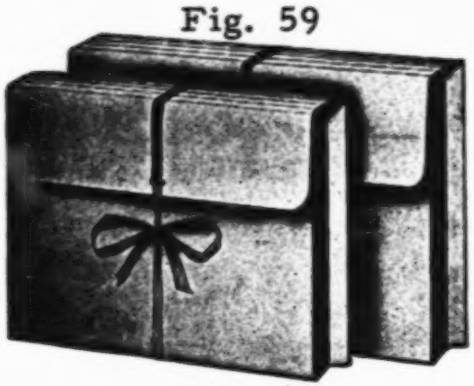


Fig. 60

Brown envelope 20" x 14" to hold all tools and work. (Fig. 60.)

ASSIGNMENT:

1. Purchase a brown envelope and collect all tools needed.
2. Bring your loose-leaf notebook for patternmaking and design up to date.

Suggestions to teacher:

Tailor's square, curved stick, and yardstick may be given to student when reporting to class, but all other supplies should be purchased by the student.

At all times a neat, exact drawing line should be stressed.

UNIT I - INTRODUCTION TO PATTERNMAKING AND DESIGN

B. Tools and Equipment

Kinds of Paper Used in Patternmaking — Lesson 7

OBJECTIVE: To become familiar with the kinds of paper used in patternmaking.

RELATED INFORMATION:

A student of patternmaking should be familiar with the different kinds of paper used not only in the designing room but in the cutting rooms of all garment manufacturing concerns. Once a pattern has been checked in muslin for style and fit and any changes transferred to the paper pattern, a final oaktag pattern is made which is used for making the markers.

Heavy white paper may be used in the drafting of preliminary patterns and for making temporary patterns. A special double-duty pattern paper that is marked with a design that establishes true grain-line may be used for faster and more precise layout of patterns, or for more accurate making of patterns. (Fig. 61.)

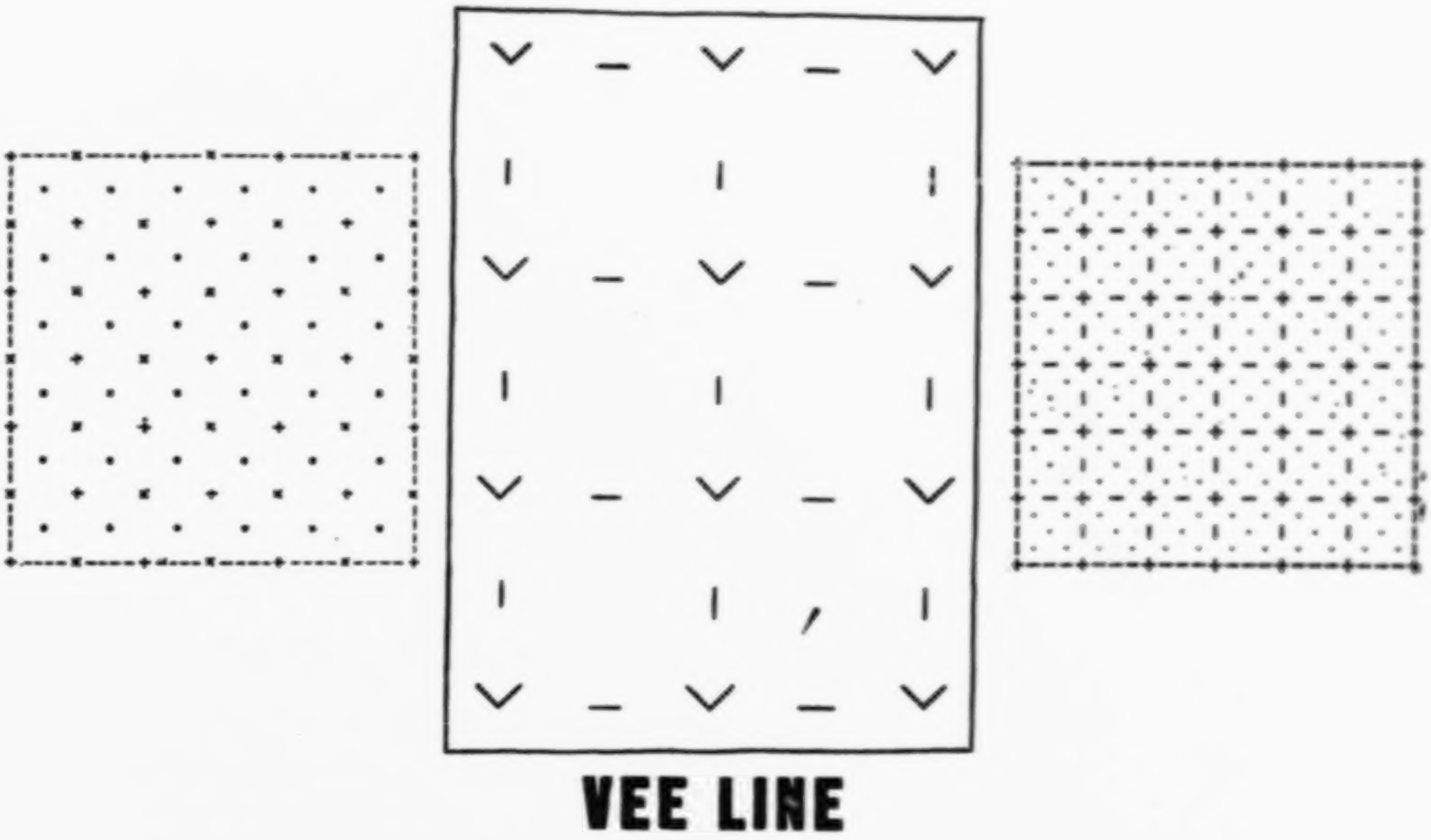
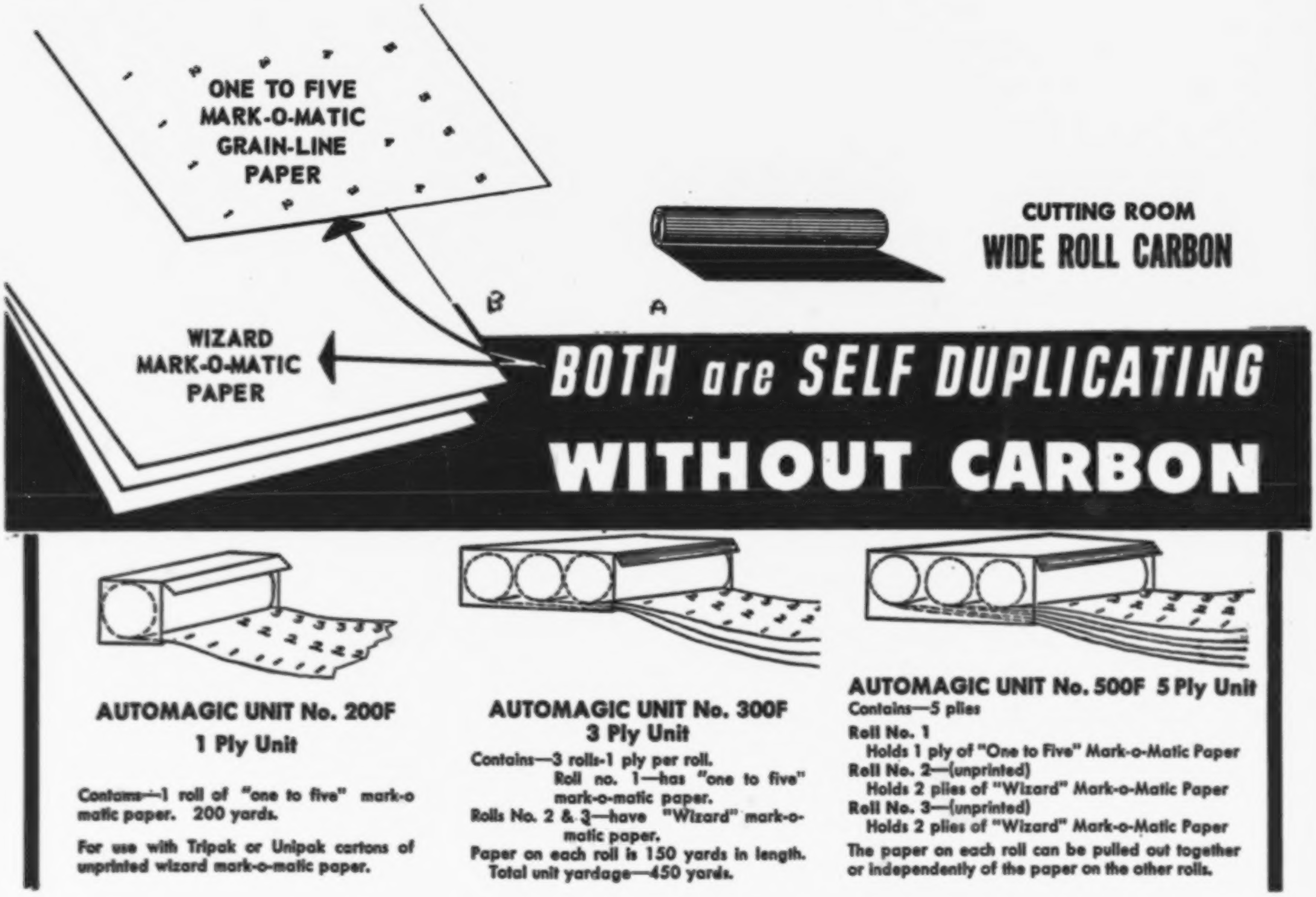


Fig. 61

There are several papers used for making the final working pattern. Heavy pattern board assures accurate patterns and non-fraying of edges. Paper that is green on one side and white on the other side helps to indicate at a glance the working surface of the pattern. There is no question as to which side of the pattern should be facing up when the marker is being made.

Once a pattern has been okayed for production, the most economical marker is planned. If a style is "selling," or a "running number," it is advisable to make more than one copy of this marker at one time. For this purpose a semicoated carbon is used (coated blue on one side only), which comes in 36" to 60" widths. Today, for efficiency-plus, a self-duplicating paper without carbon is used in many marking departments. (Fig. 62.)


ONE TO FIVE MARK-O-MATIC GRAIN-LINE PAPER
CUTTING ROOM
WIDE ROLL CARBON
B
A
WIZARD MARK-O-MATIC PAPER
BOTH are SELF DUPLICATING
WITHOUT CARBON

AUTOMAGIC UNIT No. 200F
1 Ply Unit

Contains—1 roll of "one to five" mark-o matic paper. 200 yards.

For use with Tripak or Unipak cartons of unprinted wizard mark-o-matic paper.

AUTOMAGIC UNIT No. 300F
3 Ply Unit

Contains—3 rolls-1 ply per roll.
Roll no. 1—has "one to five" mark-o-matic paper.
Rolls No. 2 & 3—have "Wizard" mark-o-matic paper.
Paper on each roll is 150 yards in length.
Total unit yardage—450 yards.

AUTOMAGIC UNIT No. 500F 5 Ply Unit

Contains—5 plies
Roll No. 1
Holds 1 ply of "One to Five" Mark-o-Matic Paper
Roll No. 2—(unprinted)
Holds 2 plies of "Wizard" Mark-o-Matic Paper
Roll No. 3—(unprinted)
Holds 2 plies of "Wizard" Mark-o-Matic Paper
The paper on each roll can be pulled out together or independently of the paper on the other rolls.

Fig. 62

After a marker is made, the cutter and "spreaders" spread the cloth for the number of ply needed to cut the number of garments ordered. For separating dye lots, a separating tissue is used; this also comes in 36" to 60" widths. (Fig. 63.)

CREPE SEPARATING TISSUE

For separating and interleaving . . . IN COLORS WHITE, PINK AND YELLOW. 6" dia. rolls. Base weight 15#. Approximately 1000 ft. to roll - 10,000 ft. to carton.

ROLL
TISSUE

Fig. 63

ASSIGNMENT:

1. Using commercial catalogs, find the prices of the following:
    a. heavy pattern board .030" thick
    b. "Vee-line" marking paper
    c. separating tissue paper
2. How is the price per roll usually determined?
3. If possible keep a small sample of all types of paper in your notebook.

UNIT I - INTRODUCTION TO PATTERNMAKING AND DESIGN

B. Tools and Equipment

Dress Forms and Fitting Cloths — Lesson 8

OBJECTIVES: To become familiar with the different kinds and types of figures used in the trade and in pattern-design classes.

To become familiar with the different kinds of fitting cloths used in the trade and in pattern design classes.

RELATED INFORMATION:

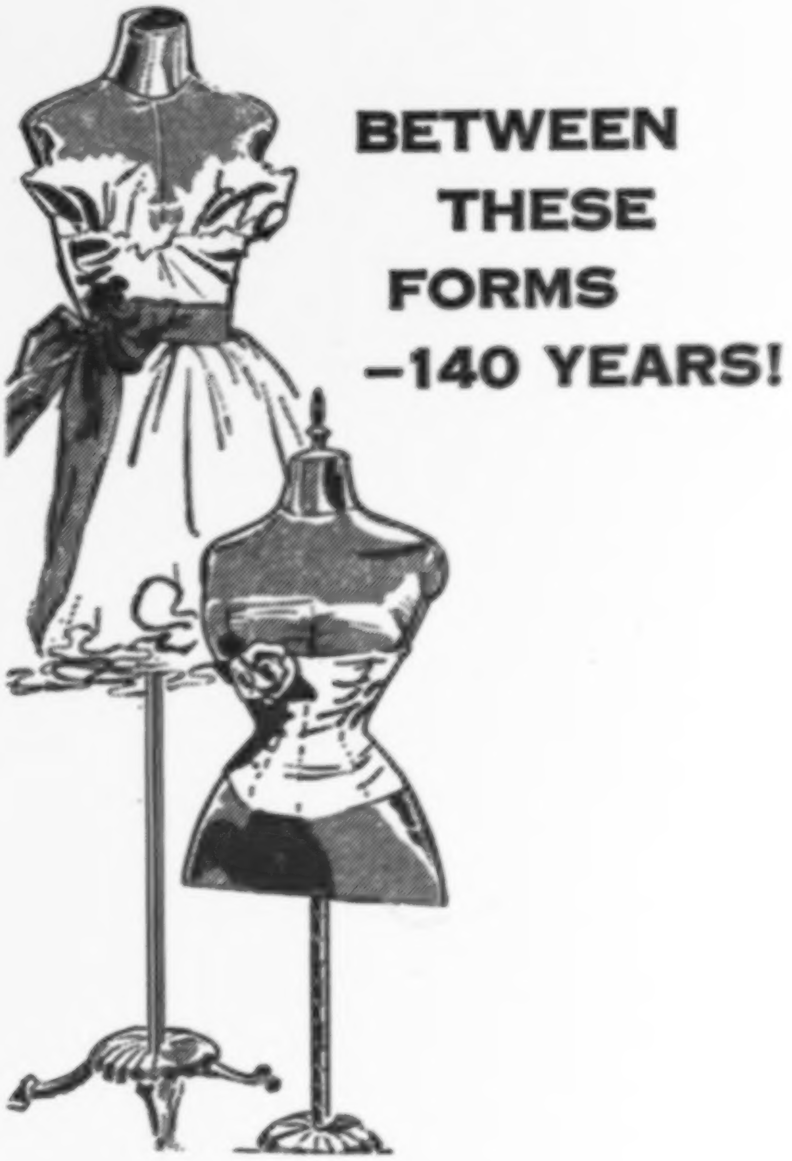


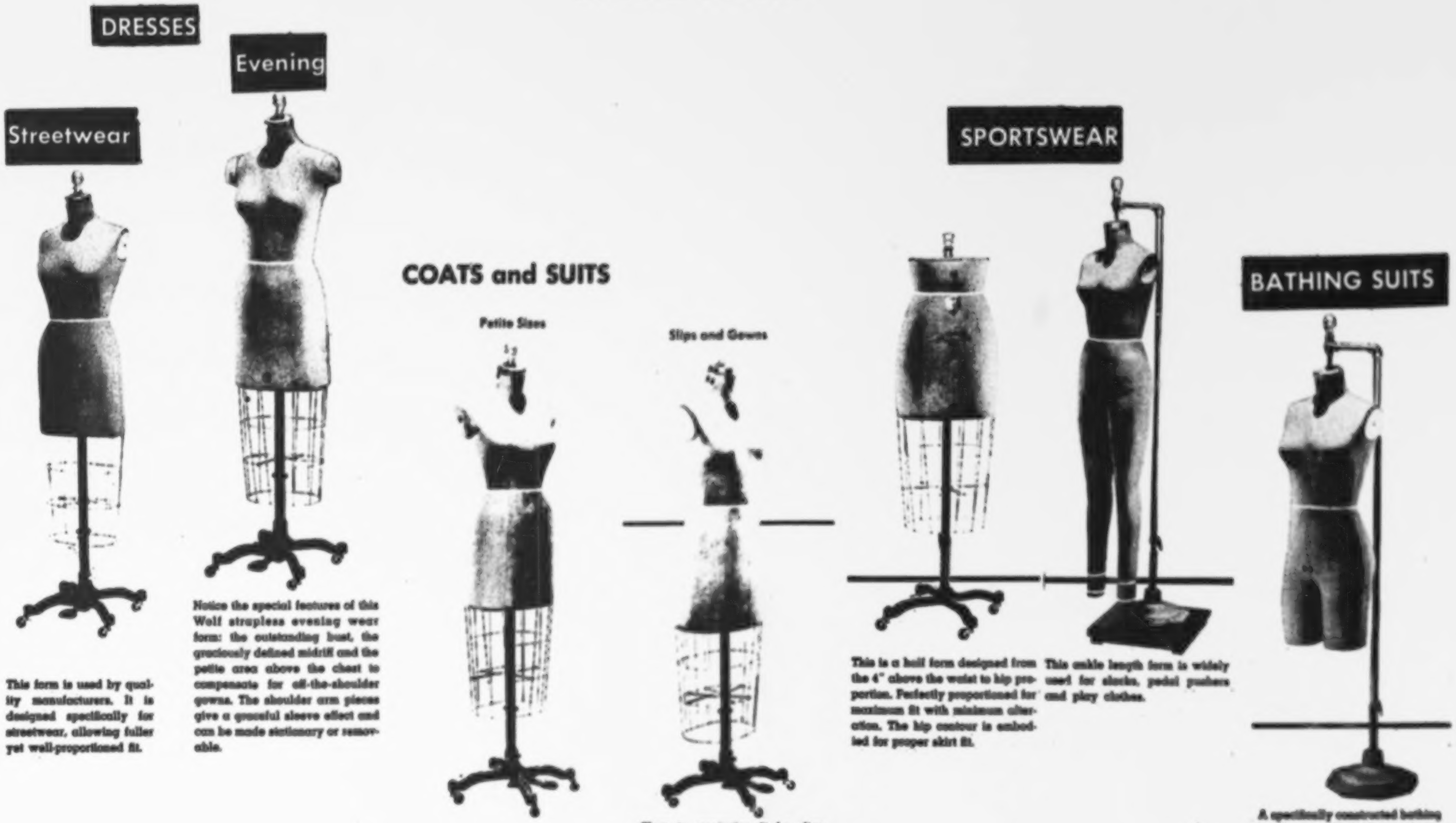
Fig. 64

Manufacturers of ready-to-wear garments depend upon the craftmanship of the men who create model forms. Through the use of the choicest materials available--canvas, papier mache, and metals--the construction of model forms which are molded to specific dimensions and contours are close replicas of the human shape.

The female shape has undergone considerable evolution through the years, and as each new "look" has come into fashion, existing forms have become obsolete and entirely new ones became necessary. Model form manufacturers must keep pace with these fashion trends and style changes and reproduce them in their dress forms.

Forms are available in all popular size ranges: Misses 12-20, Juniors 5-17, Women's 46-52, Half-sizes 12½ to 26½, Skirts 34-44, Misses 8-20. In addition to the different sizes, all forms are made according to height: short, regular, and tall. Dress forms are made for streetwear; evening, bridal, and cocktail wear; sportswear; separates; skirts; bathing suits; coats and suits; and intimate apparel.

MODEL FORMS



This form is used by quality manufacturers. It is designed specifically for streetwear, allowing fuller yet well-proportioned fit.

Notice the special features of this Wolf strapless evening wear form: the outstanding bust, the graciously defined midriff and the petite area above the chest to compensate for off-the-shoulder gowns. The shoulder arm pieces give a graceful sleeve effect and can be made stationary or removable.

Close to proportion fit for slips and gowns. A popular form with undergarment-manufacturers everywhere.

This is a half form designed from the 4" above the waist to hip proportion. Perfectly proportioned for maximum fit with minimum alteration. The hip contour is embodied for proper skirt fit.

This ankle length form is widely used for slacks, pedal pushers and play clothes.

A specifically constructed bathing suit form by Wolf. Known for its accuracy, this bathing suit form is one of the most popular forms on the market today.

Fig. 65

All of the above forms are full scale and as close to the human figure as possible. However, in pattern design the student may use miniature forms that can be in either one-half or one-quarter proportion to the regular form.

To simplify the learning process and to eliminate bulky handling, all necessary practice will be done using the one-quarter scale figure. However, it is important to test all intricate designs in full scale.

After the pattern is completed, unbleached muslin can be used for testing the pattern for line and fit. Muslin is a soft cotton fabric of firm, plain weave, and comes in various weights. A medium weight is generally the best to use, as it will have body and hang well.

ASSIGNMENT:

1. Obtain 3 samples of different types of muslin.

2. Purchase 3 yards of muslin and square it.

3. Measure the half-scale and one-quarter-scale figures in the dressmaking rooms. (Use a chart like that in Lesson 5, Assignment #1.)

4. List any other sizes or types of figures that you have seen in ready-to-wear women's clothing.

UNIT I - INTRODUCTION TO PATTERNMAKING AND DESIGN

C. Mathematics Review

Fractions **Lesson 9**

OBJECTIVE: To review fractions as related to patternmaking.

RELATED INFORMATION:

Throughout patternmaking it is necessary to find fractional measurements of materials for specific style features such as darts, tucks, gathers, etc. In adding ease, such as different types of fullness and pleats, it is also important to be accurate in the addition of fractional measurements.

PROCEDURE:

In adding or subtracting parts of things such as $\frac{5''}{8}$, $1\frac{1''}{4}$, and $1\frac{1''}{16}$, not only must the units (inches in this case) be alike, but the parts of the unit must be expressed in fractions having the same denominator.

Here we find that 16 can be used as a common denominator.

Example:

$$\begin{array}{rl} \frac{5}{8} \text{ inch} = & \frac{10''}{16} \\ 1\frac{1}{4} \text{ inch} = & 1\frac{4''}{16} \\ 1\frac{1''}{16} \text{inch} = & 1\,\frac{1''}{16} \\ \hline & 2\frac{15''}{16} \end{array}$$

In multiplying fractions, the two types of operations most common in patternmaking are:

A. Multiplying a fraction by a whole number.

Example: $6 \times \frac{3}{4}$

1. Change the whole number to an improper fraction: $\frac{6}{1} \times \frac{3}{4}$

2. Cancel terms wherever possible.

3. Multiply numerators: $6 \times 3 = 18$
4. Multiply denominators: $1 \times 4 = 4$

$$\frac{6 \times 3}{1 \times 4} = \frac{18}{4}$$

5. Change answer to whole number, mixed number, or improper fraction in its lowest terms.

$$\frac{18}{4} = 4\frac{1}{2}$$

B. Multiplying a fraction by a fraction

Example: $\frac{3}{4} \times \frac{1}{2}$

1. Cancel or reduce any numerator or denominator that can be divided by the same number.

2. Multiply the uncancelled terms remaining in the numerator for a new numerator. $3 \times 1 = 3$

3. Multiply the uncancelled terms remaining in the denominator for a new denominator. $4 \times 2 = 8$

$$\frac{3}{4} \times \frac{1}{2} = \frac{3}{8}$$

In division, one basic rule applies: invert the divisor and proceed as in multiplication.

Example: $\frac{1}{2} \div 3 = \frac{1}{2} \div \frac{3}{1} = \frac{1}{2} \times \frac{1}{3} = \frac{1}{6}$

ASSIGNMENT:

1. List the following fractions of an inch in increasing order--smallest first.

   $\frac{7}{8}$, $\frac{3}{16}$, $\frac{3}{4}$, $\frac{1}{2}$, $\frac{2}{8}$, $\frac{15}{16}$

2. Work the following problems. Be on the alert for cancellations. Reduce the answers to the lowest terms.

   a. $1\frac{1}{4} \times 3$

   b. $\frac{7}{8} \div 2$

   c. $2\frac{7}{8} \div 2$

   d. $2\frac{1}{2} - \frac{7}{8}$

   e. $1\frac{1}{2} \times 7$

   f. $16 \times \frac{1}{2}$

   g. $\frac{9}{16} \div 3$

   h. $3\frac{3}{4} \div 5$

   i. $17\frac{1}{2} \div 7$

   j. $2\frac{1}{4} \div \frac{3}{4}$

   k. $9 \div 12$

   l. $16 \div 3\frac{1}{2}$

   m. $14 \times 2\frac{1}{8}$

   n. $50 \times 7\frac{1}{6}$

   o. $7\frac{3}{4} - 3\frac{7}{8}$

   p. $2\frac{1}{2} - 1\frac{1}{4}$

   q. $12\frac{7}{8} - 3\frac{1}{2}$

   r. $8\frac{1}{2} - 1\frac{3}{4}$

   s. $2\frac{1}{2} + \frac{3}{4}$

   t. $3\frac{1}{4} + \frac{1}{4}$

   u. $\frac{1}{4} + \frac{7}{8} + 2\frac{1}{2} + 1\frac{3}{8}$

   v. $\frac{15}{16} + \frac{1}{2} + \frac{5}{8} + \frac{3}{4}$

UNIT I - INTRODUCTION TO PATTERNMAKING AND DESIGN

C. Mathematics Review

Ratio and Proportion **Lesson 10**

OBJECTIVE: To review ratio and proportion as related to patternmaking.

RELATED INFORMATION:

There are many occasions when the patternmaker works with amounts and must compute their relationship to other amounts. This occurs in estimating shirring, smocking, tuckings, and pleatings.

We may express ratio in three ways. If we wish to compare the quantities 3 and 5, we could use any of these expressions. They all mean the same thing.

1. $3 : 5$ (read 3 is to 5)
2. $3 \div 5$
3. $\frac{3}{5}$

As a matter of custom, a ratio is generally written in fractional form. We can, therefore, do anything to a ratio, without changing its value, that we can to any other fraction. Consequently, both terms of a ratio can be either multiplied or divided by the same number without changing its value.

The ratio of two numbers is the quotient of the first number divided by the second.

Example: If a skirt measures 25 inches at the waist and the material to be gathered measures 75 inches, the ratio of the fabric used for the skirt to the finished measurement is 3 : 1.

$$\frac{75}{25} = \frac{3}{1}$$

A tuck is a fold in the cloth for the purpose of trimming or decoration. A tuck takes up twice its own depth, that is, a one-inch tuck takes up two inches of fabric.

You must remember that, no matter what size tuck is used, the same rule applies: Twice the width of the tuck from stitch to fold is the amount of extra fabric needed for one tuck.

Fullness for ruffling, shirring, and smocking

The two determining factors in estimating how much material is required for ruffles, shirrings, and smockings are:

1. Weight of the fabric (i. e., voile or batiste would require more fabric than wools or brocades).
2. The amount of fullness desired.

Pleating

A pleat is a fold in the fabric that releases fullness. Pleats can be prepared by the dressmaker or, as in the garment industry, sent out to a shop that specializes in steam pleating--sometimes called machine pleating. However, any design using pleats must be figured before the fabric is sent out to be pleated.

If the underlay is the same width as the pleat, you will need fabric three times the width of the pleat to make one pleat.

Example: For a one-inch pleat with a one-inch underlay, the actual measurement of material needed to form the underlay will be 2 inches.

Therefore 3 inches of material will be needed to make one pleat.

The ratio is expressed as 3 : 1 pleating.

ASSIGNMENT:

1. The examples below are for fullness. Estimate the amount of fabric needed, using the measurement and the ratio listed.

	Ratio	Finished measurement	Fabric needed
A.	$2\frac{1}{2}$: 1	23"	________
B.	3 : 1	$23\frac{1}{2}$"	________
C.	7 : 1	$25\frac{1}{2}$"	________
D.	$3\frac{3}{4}$: 1	$12\frac{1}{2}$"	________

2. Give the amounts of material needed for one tuck in the following sizes:

A. $\frac{1}{16}$" tuck ________

B. $\frac{1}{8}$" " ________

C. $\frac{3}{8}$" " ________

D. $\frac{7}{8}$" " ________

E. $\frac{1}{4}$" " ________

F. $\frac{1}{2}$" " ________

G. $1\frac{1}{2}$" " ________

H. $\frac{3}{4}$" " ________

3. How much material is required to make ten single pleats 2" wide with a one-inch underlay?

4. The front of a child's dress was cut 28" wide, but when pleated it measured just 16 inches. How many one-inch pleats with a one-inch underlay were made in the dress front?

C. Mathematics Review

Estimating Yardages Lesson 11

OBJECTIVES: To become familiar with the making of markers.
To learn simple rules for estimating yardages.

RELATED INFORMATION:

A layout or "marker"--the laying out of all pattern pieces for one garment as economically as possible--is like playing with a big jigsaw puzzle. Before starting to work on the development of a marker, a good rule to follow is to have the sketch of the dress, or as in manufacturing concerns, the duplicate dress in front of you. Check the correct number of pieces for the garment against the pattern pieces you will be working with. In industry, the marker is developed on paper the width of the fabric to be used. The pattern pieces are traced on the paper and duplicate copies made for future use. All pattern pieces are placed open; nothing is placed on the fold. There is a separate pattern piece for every section of the dress; e. g., right-front gore, left-front gore, center-front gore, right-front facing, left-front facing, center-back gore, left-back gore, right-back gore, and skirt band. The necessary pattern pieces for this button-down-front skirt are sketched below.

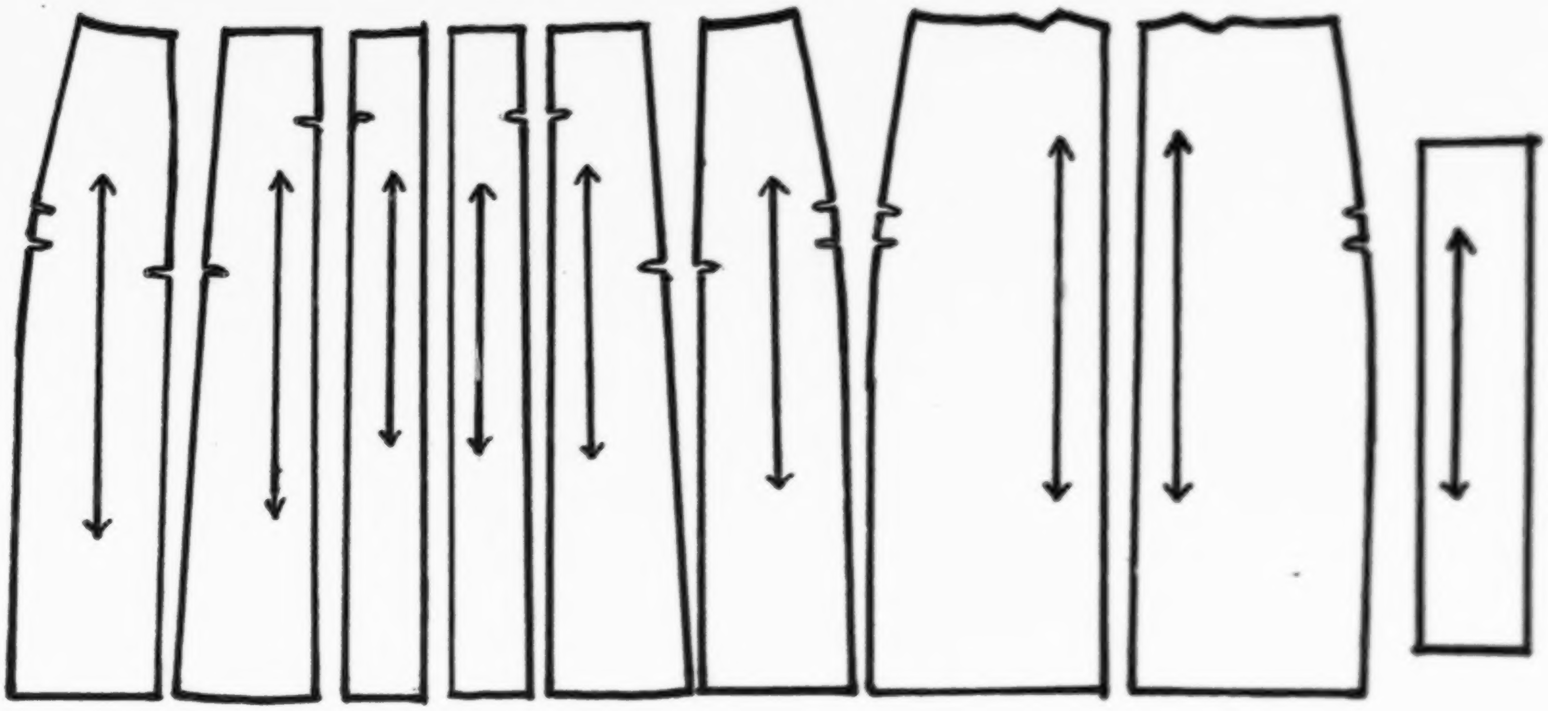


Fig. 66

When cutting a single dress, however, it is easier to fold the fabric correctly on grain so that you can cut two of any pattern piece at the same time. For instance by using only the left gore pattern piece on the folded fabric, you will be cutting a matching right gore at the same time. (Fig. 67.) This would be time saving in the following instances:

1. In the development of a duplicate dress where the corrected muslin is used as the pattern.
2. When sections of a dress are to be cut, sewn, and checked for further corrections, before the rest of the garment is cut.

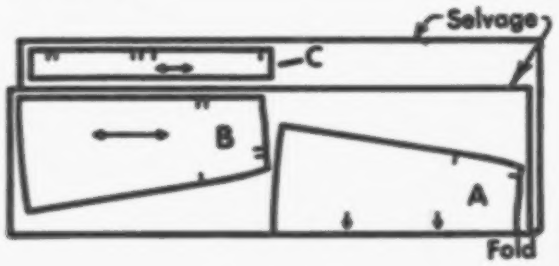
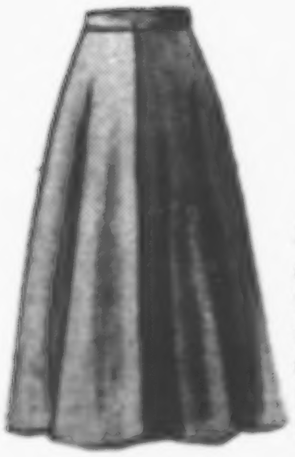


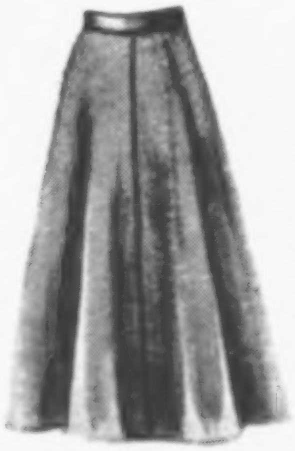
Fig. 67

Fabrics that have a nap, pile, or directional weave require special treatment. All pattern pieces must be arranged on the fabric or marking paper in the same direction (that is from the top of the garment to the bottom). The nap runs up for pile fabrics like velvet, corduroy, and velveteen, down for the nap fabrics like wool broadcloth or long-haired woolens. The same principle applies whether laying out a pattern for a single dress or making a marker.



WRONG

If, you disregard the one-way rule, and pin your pattern pieces in different directions, the effect will be similar to the sketch. If in a skirt, for example, the shading of your gores will differ. One side will be much darker than the other.



RIGHT

If, when working with a nap fabric, you are careful to pin and cut your pattern with the top of each piece running in the same direction, your garment will be evenly shaded. With velvets and corduroy, incorrect layouts result in vast differences in shading.

Here is a layout for a pattern on a nap fabric. Note the pattern pieces all laid in one direction and on wrong side of fabric.

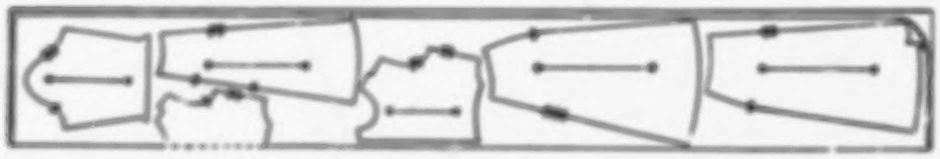


Fig. 68

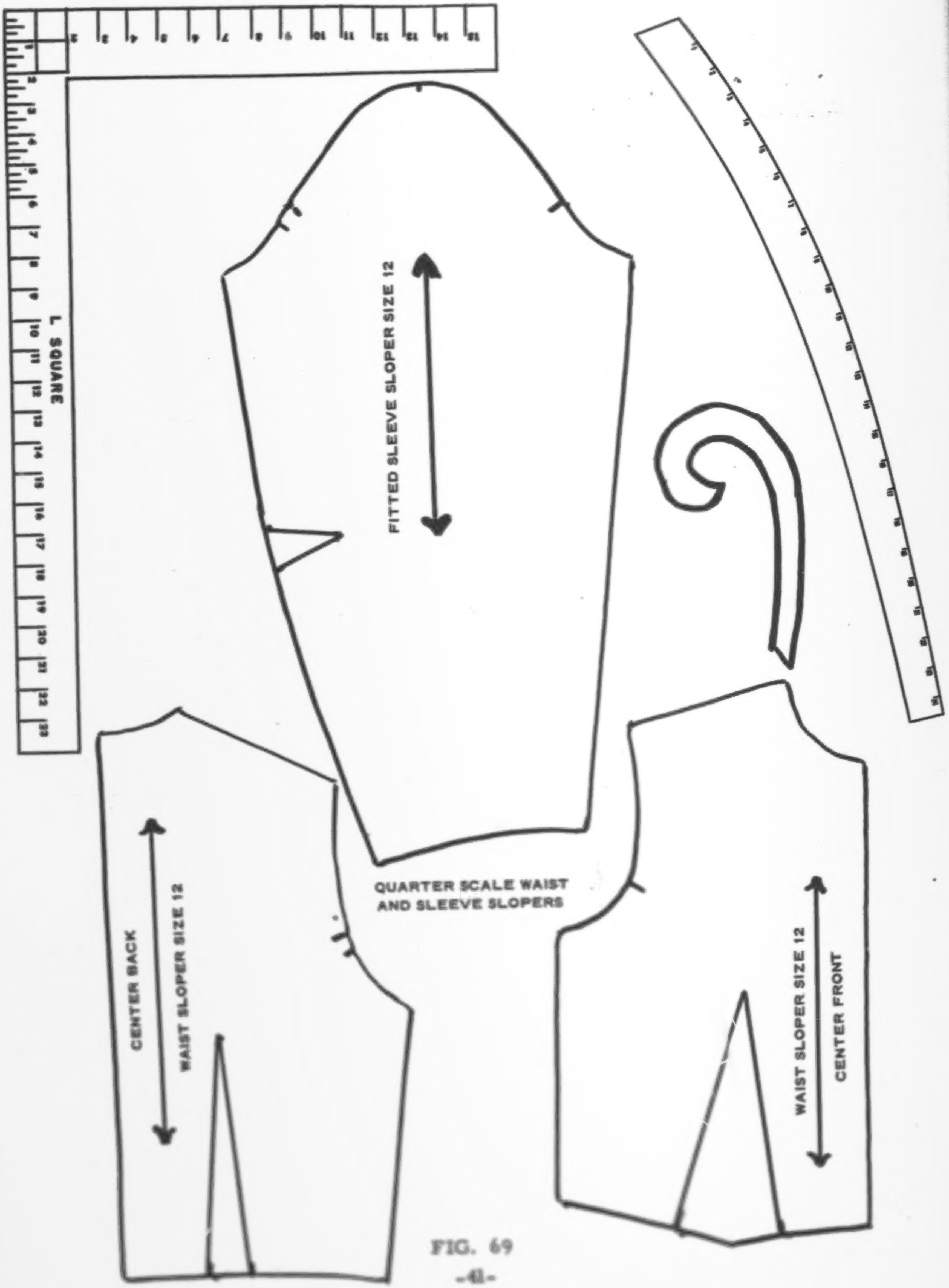
PROCEDURE:

In the making of a marker, the following rules should be followed:

1. Check the number of pattern pieces against the sample dress.
2. On the table, place paper the width of the fabric to be used.
3. Lay out pattern pieces with the grain parallel to the selvage. (The outside edge of the paper corresponds to the selvage of the fabric.)
4. Place the largest pieces first. (These are usually the major, basic pieces.)
5. Arrange the smaller pieces in the spaces left, making sure pattern pieces are placed on grain.
6. After fitting all pieces as closely as possible, measure the paper. This gives the yardage needed for one dress.

ASSIGNMENT:

1. Using 18", 22", and 27" paper and the half-scale pattern given you by the teacher, work out the following:
   a. Make markers for each.
   b. Give the yardage needed for each width of paper.
   c. What would the yardage be for each of the above markers for full-scale patterns?
2. Using 9", 12", and 15" paper and a ¼-scale oaktag pattern, work out the following:
   a. Make markers for each.
   b. Give the yardage needed for each width of paper.
   c. What would the yardage be for each of the above markers for full-scale patterns?
3. a. How much material would be needed for 25 dresses using the half-scale sloper and 22" paper?
   b. Using the ¼-scale sloper and 9" paper?


L SQUARE
FITTED SLEEVE SLOPER SIZE 12
CENTER BACK
WAIST SLOPER SIZE 12
WAIST SLOPER SIZE 12
CENTER FRONT

QUARTER SCALE WAIST AND SLEEVE SLOPERS

FIG. 69

UNIT II - SLOPERS

A. Introduction to the Basic Sloper Lesson 1

OBJECTIVES: To become familiar with a basic sloper - to understand its purpose and the importance of accuracy in constructing slopers.
To learn the other terms for a basic sloper.

RELATED INFORMATION:

The basic sloper is the flat development of the model form in paper, containing all of the vital points such as neck, shoulder, armholes, and any other features. Since the basic sloper contains all of the features of the model form, it can be used to develop various effects and style lines. When completed, no matter what the style change, the garment will still conform to the model form.

The sloper used for designing dresses is made up of bodice front, bodice back, skirt front, skirt back, and sleeve. A sloper is also known as a foundation, master, block, or basic pattern. The sloper is drafted to standard measurements in a given size. In the apparel industry, however, slopers differ from one manufacturing firm to another, even though they may be working on the same type of garment (such as formal, sportswear, etc.). Even though an effort has been made to standardize women's sizes, many firms do not adhere to the same measurements for a given size.

All pieces of a sloper must be checked for accuracy, fit, and balanced seam lines. The silhouette and lines of every new fashion are but variations of the basic sloper. The sloper is made up in a single size, and the other sizes in the line are developed from it. The development of the other sizes is called grading.

The two specific uses for a sloper are (a) for developing style lines and design, and (b) as a basis for grading. For simplicity in designing, no seam allowances, hems, or extra fullness are included in the basic sloper; these are added after the style has been created and the pattern completed.

Basic sloppers, however, should contain certain basic information, as to:

1. Size - determined by body measurement.

2. Ease - amount added to the body measurement for body movement and comfort in wearing.

3. Dart control - proper placement and correct amount for dart in each of the sloper pieces. Each of the five basic pieces has at least one dart to control the extra amount of cloth needed to cover a body curve.

4. Contour - the outline of the piece which follows the proper fit of neck, shoulders, armhole, side seams, and waistline.

As the development of a sloper by drafting is somewhat complicated, it will be covered at a later time. Meanwhile, to simplify the learning process of creating individual styles, quarter-scale slopers of the three basic pieces (bodice front, bodice back, and sleeves) are reproduced for you in Fig. 69, together with some of the basic tools used in patternmaking.

There are two very important things for you to remember when using the quarter-scale slopers.

1. All instructions for patternmaking give the measurements required for full size 12, so you must reduce all measurements to one-quarter.

2. All charts and illustrations have full-size measurements marked on them, even though the charts have been drawn to a smaller size. Again you must reduce each measurement to one-quarter.

Following are a few rules to remember throughout patternmaking:

1. At all times make neat, exact drawing lines.

2. Read your instructions very carefully and follow them to the letter, completing each step in the order given.

3. Locate the correct starting point before you take up each new step.

4. Take measurements carefully.

5. Follow instructions carefully and as stated, such as drawing lines in definite directions (left to right, top to bottom, etc.)

6. For all patterns to be made, no matter how simple, a draft (that is, a drawing showing all new style lines and changes to be made) must be developed.

7. NEVER CUT THE DRAFT. It is best to keep the draft intact for reference in case of error in the pattern.

8. Assemble the draft on your paper in an artistic and professional manner.

9. Try to analyze and understand what every line in the draft represents.

10. Be careful not to waste your paper and other supplies.

QUESTIONS:

1. What is meant by a basic sloper?

2. How does it conform to the basic model form?

3. What are the principles that must be followed in constructing the basic sloper?

4. What is the purpose of the basic sloper?

ASSIGNMENT:

Using a quarter-scale figure and a full-scale figure, size 12, check and compare the following measurements:

		Full scale	Quarter-scale
1.	front waist	________	________
2.	back waist	________	________
3.	front shoulder length	________	________
4.	center-front bodice length	________	________
5.	center-back bodice length	________	________
6	full bust measure	________	________

UNIT II - SLOPERS

B. Developing the Basic Sloper

Draping a Sloper in Muslin **Lesson 2**

OBJECTIVES: To learn the principles of draping on a model form.
To develop a bodice sloper by draping.
To understand how draping helps the designer and patternmaker.

RELATED INFORMATION:

Draping is the process of shaping a flat piece of cloth to fit a curved model form or the human figure.

Once a basic sloper has been derived from draping the muslin over the model form, you can well understand the help this would give to the patternmaker in getting true and well-fitting patterns.

For the development of a final oaktag sloper through draping, a medium-weight muslin will be used. In developing a sloper from muslin, only half of the figure will be draped. If the selvage is not used for the center-front and center-back, it is important to pull a thread on the lengthwise grain or to mark the lengthwise thread.

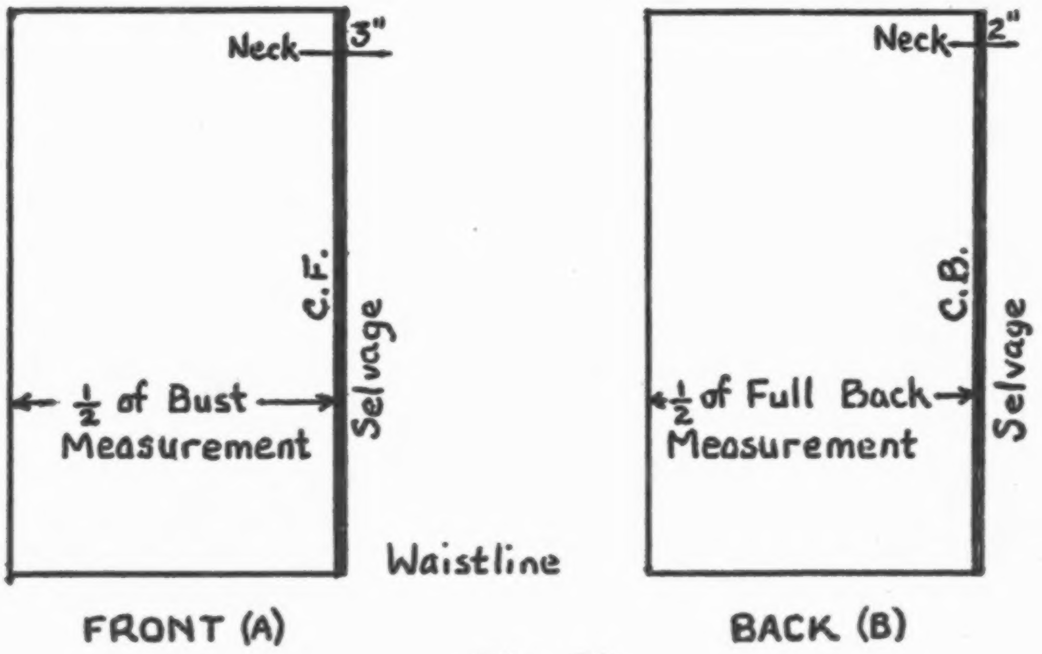
In draping a flat piece of fabric (muslin in this case) over the model form, you will notice the presence of drooping folds or wrinkles. The wrinkles or folds will be placed in the waistline dart, the simplest manner of disposing of excess material formed by the bust bulge.

The folds and softness desired can be carried out successfully in flat pattern work with the aid of the sloper once you have gained experience in making patterns. To add this softness, you will also have to have a knowledge of the grain of the fabric to be used in producing the garment.

One of the chief factors that the drape depends upon for its success is the grain of the fabric. The designer in most cases uses fabric specifically chosen to carry out some creative idea which can be accomplished only by using the actual fabric instead of the plain muslin.

PROCEDURE:

It is important to cut the muslin piece for draping with enough extra length and width to take care of all the curves and bulges. In preparing the muslin for draping, the following measurements will be needed:



FRONT (A)

BACK (B)

Fig. 70

Front Bodice: (Fig. 70-A)

1. Length of fabric - center-front measurement, taken from base of neck to waist, plus 3".
2. Width of fabric - ½ of front bust measurement, plus 2".

Back Bodice: (Fig. 70-B)

1. Length of fabric - center-back measurement, taken from base of neck to waist, plus 2".
2. Width of fabric - ½ of full-back measurement, plus 2".

FRONT BODICE:

1. Cut muslin, using measurements as shown above for half of the front.
2. Press muslin to remove all creases, in the direction of the lengthwise grain.
3. Place selvage on the center-front (C. F.) of the form, extending the muslin 2' beyond the center-front (C. F.) neckline and 1" below the C. F. waistline. (Fig. 71.)

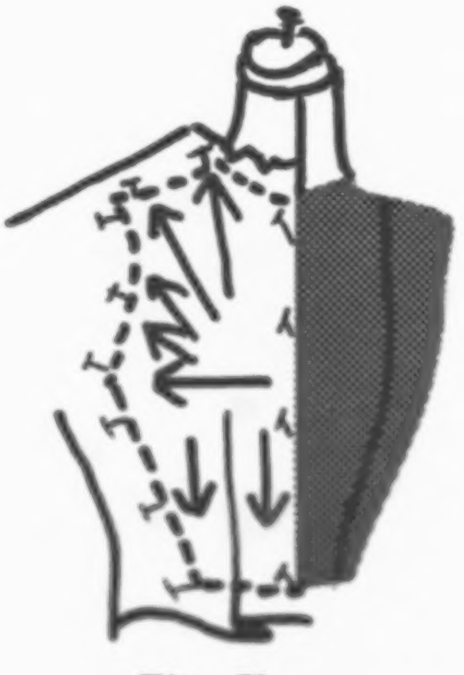


Fig. 71

4. Pin to model form at the center-front neckline and waistline. The selvage or center line must be smooth, straight, and absolutely vertical.

5. Keeping the crosswise grain horizontal over the chest, work the muslin toward the neckline. Pin in place.

6. Clip at the neck and pin the muslin firmly to neckline position.

7. Smooth the muslin across the shoulder, using palm of hand in the direction shown. Pin on shoulder seam. (The arrows on the sketch indicate how the muslin should be worked into position.)

8. Pin along underarm side seam.

9. Placing fingers at bust point, draw excess muslin in smoothly to form a waistline dart. (The dart should follow the side-front seam line on the model form.) Pin closely from bust point to waist to form a smooth dart.

10. It will be necessary to clip muslin at the waist near the side seam for fit at the curve at the waistline.

11. Carefully mark all seam lines, using tailor's chalk or marking pencil.

12. Mark both edges of the dart (seamline of dart).

13. Remove muslin drape.

BACK BODICE:

Follow the instructions listed for the front bodice, making note of the following differences:

1. Place selvage on the center-back of the form, extending the muslin 1½" above neckline and ½" below C. B. waistline.

2. At shoulder seam leave ¼" of extra muslin for ease.

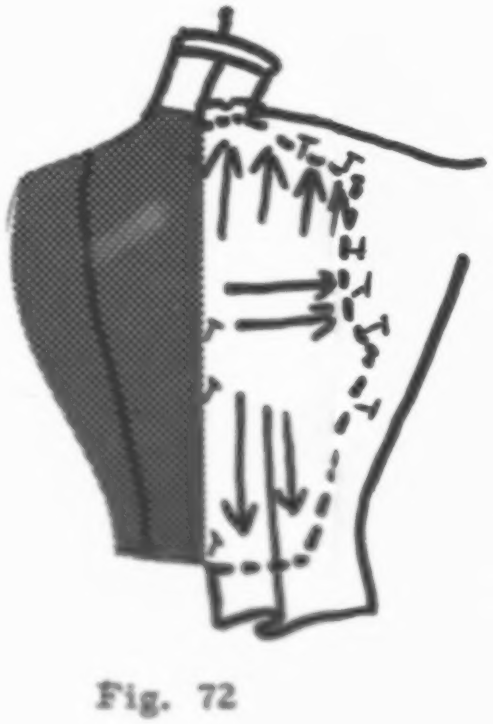


Fig. 72

After the muslin has been marked carefully and checked so that no markings have been omitted, remove the muslin from the form. Transferring muslin to paper will be covered in the next lesson.

ASSIGNMENT:

1. Using muslin, drape the front and back bodices for the $\frac{1}{4}$-scale, half-scale, or full-scale model in classroom.
2. Be sure to follow instructions and sketches shown.

QUESTIONS:

1. What is the basic meaning of drape?
2. How does draping relate to the human form?
3. How does draping help the patternmaker and the designer?
4. What is the most important factor to be remembered about draping?
5. What is meant by "grain"?

UNIT II - SLOPERS

B. Developing the Basic Sloper

Transferring Muslin Drape to Paper Pattern — Lesson 3

OBJECTIVES: To learn the correct method of transferring a muslin drape to paper pattern.
To review the importance of marking grain lines, darts, etc.
To learn how and why we "true" darts.

RELATED INFORMATION:

Before a final oaktag sloper is made ready for use for all the designs to be made in patternmaking, it is a good policy to (a) transfer the muslin drape to pattern paper, (b) cut a completely new bodice in muslin from the paper pattern, and (c) recheck the new muslin on the model figure.

After removing the muslin from the figure, press it carefully and be sure it is "trued" before transferrring it to paper. A crosswise grainline should be marked on the muslin from center-front to the underarm seam on both front and back bodices.

PROCEDURE:

A. Transferring muslin drape to pattern paper. (Fig. 73.)

1. Draw a vertical line on the paper, representing the center-front.
2. Draw a horizontal line at a right angle to the vertical line, to match the crosswise grainline on the muslin.
3. Place the front-bodice muslin on paper, matching crosswise and lengthwise grains. (Be sure to keep muslin from shifting - use weights or push pins in, depending on table surface.)
4. Smooth remainder of muslin into position.

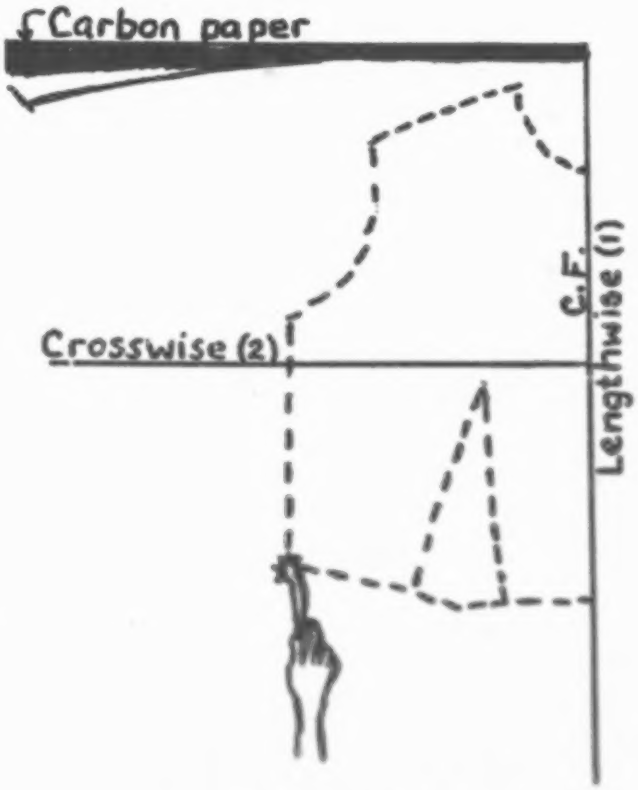


Fig. 73

5. Be careful not to stretch the muslin.

6. Trace complete muslin drape, following the markings made from the model figure. (Use a tracing wheel and carbon paper.)

7. Trace waistline dart.

8. Remove muslin.

9. Straighten and refine all lines. Using a square, or ruler, straighten all seamlines transferred to pattern paper. Use a Dietzgen #17 curve for armholes and neckline, and blend and correct any unevenness of line. (Each time a line is copied, no matter how carefully traced or cut, errors or unevenness may develop.)

10. Repeat the same steps for the back bodice.

B. Trueing of darts

The two lines which form the dart are called the dart legs. The point at which they meet is called the dart point. (Fig. 74.) Dart legs must be of equal length and should always be checked whenever any change is made.

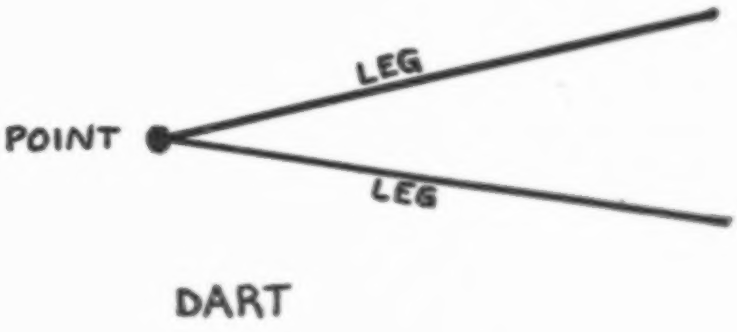


Fig. 74

In order to eliminate pulling from the seamline at the bottom of a dart due to insufficient fabric, all darts must be trued. Simply, this is a procedure where the closed dart is checked to allow for the inclusion of enough material so that the bottom of the dart will be even with the rest of the seamline. The dart must be closed and cupped before trueing and blending the seamline. Unless the dart is carefully cupped, length will be lost on the dart at the waistline seam.

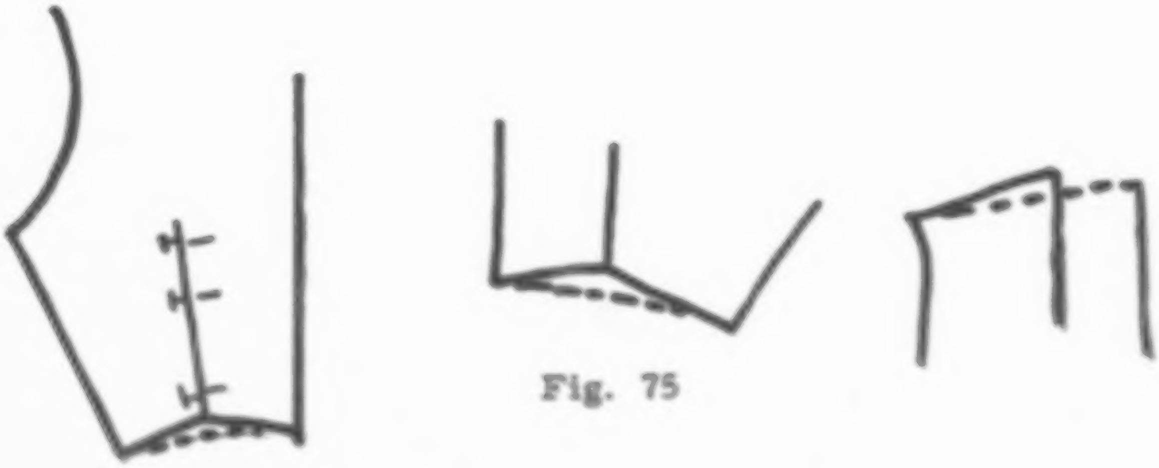


Fig. 75

1. Crease dart on one dart leg line and match to the other in the proper direction. (Waistline darts are folded as they will be pressed-toward the center-front or center-back; bust-line darts are folded down toward the waist.)

2. Above the point of the dart the paper will form a cup.

3. The dart may form either an angular joining or a protruding section at the seamline, depending on the position of the dart. (In the basic waistline darts, an angular joining is formed.)

4. Correct the angular joining of the waistline dart by drawing a smooth curved line at the bottom of the dart. This trues the dart.

C. Ease

Any garment worn by an active being must have ease, that is, it must allow room for movement. There must be freedom of movement within the areas of the encasing garment - around bust point, armholes, and hip line.

After side seamline has been refined, extend armhole $\frac{1}{2}$ inch at underarm seam and add $\frac{1}{2}$" for ease all along the side seam.

ASSIGNMENT:

1. Follow instructions, transfer muslin drape to pattern paper.

2. "True" back and front waistline darts.

3. Add necessary ease.

B. Developing the Basic Sloper

Adding Seam Allowances and Notches Lesson 4

OBJECTIVES: To become familiar with the seam allowances used in industry.
To learn the importance of accurate seamlines.
To learn to true seamlines and add notches.

RELATED INFORMATION:

You will recall that no seam allowance was provided on the muslin drape from which you have been making your sloper. Seam allowances must be provided at this point so that your muslin proof may be sewn or pinned together for rechecking on the model figure. In all of pattern-making, the sloper (without seams) is used as a basis for designing patterns. Therefore seam allowances are added after the pattern has been designed. At this point, seam allowances are made on the muslin only to recheck the sloper before it is used in the drafting of patterns.

Seam allowances are not standardized in the garment industry. They vary according to the selling price of the garment and the weave of the fabric being used. Higher priced garments usually have generous seams to facilitate alterations. For the sake of uniformity, we will use the following seam allowances:

1. $\frac{3}{4}$" allowance on all basic seams such as shoulder, arm-hole, waistline, underarm, skirt-panel, and bodice-section.

2. $\frac{1}{4}$" allowance on all seams that will be covered with a facing, such as neckline, cuff, collar, etc. Since these areas are usually faced and the seam must lie flat, any seam larger than $\frac{1}{4}$" would have to be trimmed. Therefore, to save time, any seam that is to be covered with another piece of fabric should be $\frac{1}{4}$" or less, depending on the fabric.

PROCEDURE:

A. Adding seam allowances

1. Keeping the dart which has been trued closed, add seam allowances, using $\frac{3}{4}$" at waistline.

2. To transfer seam allowance to the inside of the folded dart, trace (using a tracing wheel) the line you have drawn through the folded dart. Open the dart and draw a line over the tracings.

3. Add $\frac{3}{4}$" seam allowance to underarm, armhole, and shoulder seams.

4. Add $\frac{1}{4}$" seam allowance at neckline.

5. Use a ruler or square for any straight seams and a curve for smooth curved lines.

6. There will be no seam allowed at center-front because this pattern is one-half of the front, and the final pattern will be placed on the fold of the fabric. (In industry no pattern is placed on a fold. Instead of one-half of a section of a dress, there would be one full pattern piece covering both right and left areas of the section.

B. Necessary pattern markings for basic sloper

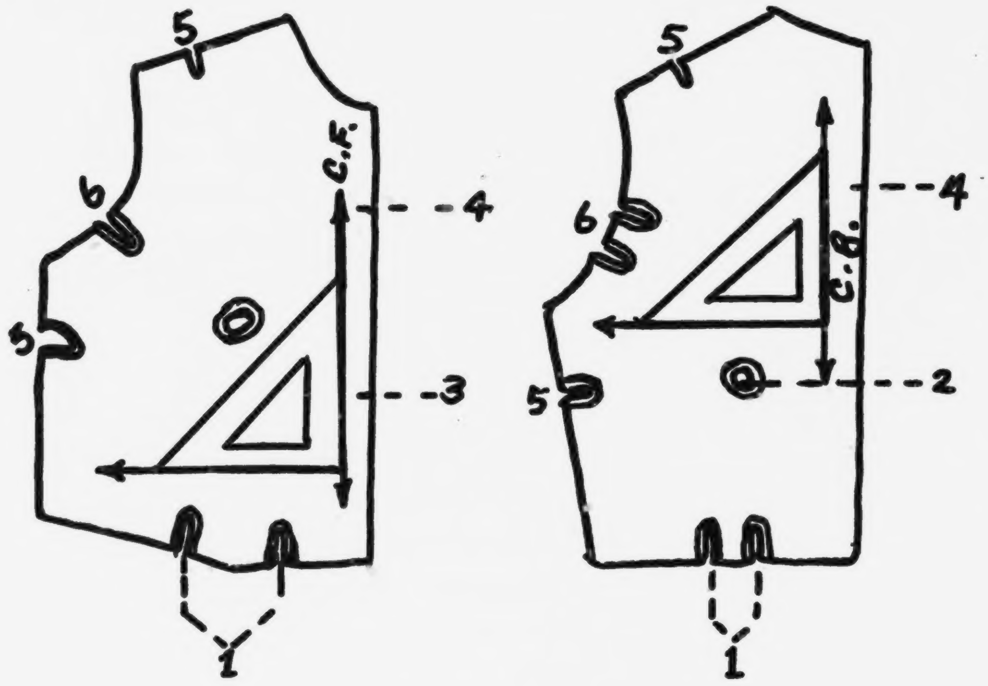


Fig. 76

The following marking symbols must be transferred to the paper pattern before it can be checked and used in making a final sloper. (Numbers refer to corresponding numbers on Fig. 76.)

1. Using notcher, mark and cut square notch at seam ends of dart.

2. Mark circle or punch-hole to show dart point.

3. Using your triangle, draw the arrows which will show the direction of the vertical and horizontal grains of the fabric.

4. Mark center-front line (C. F.) and center back line (C. B.)

5. Using notcher, mark and cut square notches at corresponding points on underarm seam and shoulder seam.

6. Mark notches for matching bodice front and back to sleeve.

After all markings have been transferred to paper pattern, cut pattern and check the following:

1. Seams for length and accuracy of notches. (Match front and back bodice at side seam and shoulder seam.)

2. Length of dart legs.

ASSIGNMENT:

1. Working with your back- and front-bodice patterns, add seam allowances as instructed.

2. Add necessary pattern markings.

3. Cut out back and front bodice patterns with paper shears.

4. Bring to class enough muslin for bodice front and back.

UNIT II - SLOPERS

B. Developing the Basic Sloper

Checking and Criticizing Muslin Proof — Lesson 5

OBJECTIVES: To learn how to cut a muslin proof from a construction pattern.
To learn how to join the muslin proof for fitting.
To become familiar with the important areas to be checked for fit.
To learn how to check for the necessary ease in slopers.

RELATED INFORMATION:

You have completed your paper pattern, which will be used to test the new muslin proof you are about to cut. All symbols appearing on the paper pattern must be transferred to the muslin. This will include lengthwise and crosswise grain, seamlines, darts, and notches. Be sure the muslin is free from wrinkles; press it, if necessary, with the lengthwise grain of the fabric. Lay the center-front of the pattern on the lengthwise grain of the muslin and pin pattern firmly to muslin, which should be flat upon the table. Cut around the pattern carefully, with the fabric shears resting upon the table. Keep shears sharp. Do not pick up fabric when cutting. Keep the work flat upon the table as much as possible.

In assembling your muslin proof, work with muslin flat on the table, otherwise it is easy for the seam edges to slip between the fingers. All of this work must be very exacting, as this final checking will be the basic for all future work on this pattern.

PROCEDURE:

A. Sewing or pinning the muslin proof

1. Fold in darts by pinning the two dart legs together. Sew.

2. Because the seam allowance added at a curved neckline actually reduces the measurement of the neckline, it is necessary to snip tiny slashes in it at intervals of $\frac{1}{2}$", as indicated. The slashes should not extend beyond tracing line (seamline). This will permit the muslin to fit smoothly around the neck of the model form.

3. Join shoulder seam, easing in back shoulder.

4. Join underarm seam.

5. Press seams and darts in the correct direction, being careful not to stretch muslin.

B. Checking and criticizing the muslin proof

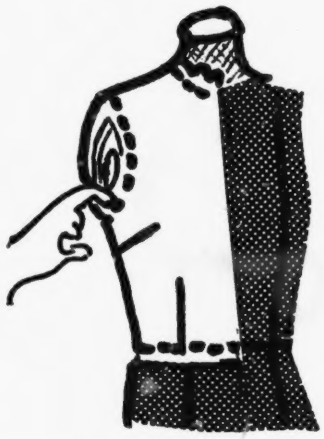


Fig. 77

1. Place the center-front and center-back of muslin proof on the center markings of the model form.

2. Pin center-back at neck and waistline.

3. Pin center-front at neck and waistline.

4. Pin shoulder seam at shoulder marking of model form.

5. Pin underarm side seam at underarm marking of model form, at waistline.

6. Test ease allowance by inserting two fingers into lower part of the armhole.

It is at this point that you must be very critical. Once the new muslin has been cut and sewn together, rechecking the fit on the model form is of utmost importance. While checking the muslin, be sure to make any necessary corrections on the muslin proof. These corrections will be transferred to the paper pattern.

In checking the muslin, be sure to cover the following important points:

1. Grainline

    a. The center-front and center-back grains (vertical grain) hang straight and at right angles to the floor.

    b. The horizontal grain should be checked at several places across the chest. It should be at right angles to the vertical grain and parallel to the floor.

2. Placement of all seams in relation to model form - Seam must be in same position as seam on model form.

3. Placement of darts in relation to model form - Fitting your muslin may reveal the need for more dart control or less dart control.

4. Correct amount of ease.

5. The smoothness of the muslin - no pulling or sagging due to poor fit at any point.

   Wrinkles that appear indicate one of two things - either the grain is not right or more dart control is needed. First check the grain. Release the seam involved, smooth out the wrinkles, and repin.

ASSIGNMENT:

1. Cut construction pattern in muslin.

2. Sew muslin proof following Instruction A.

3. Check muslin proof on model form and make any corrections needed.

B. Developing the Basic Sloper

Final Oaktag Sloper — Lesson 6

OBJECTIVES: To transfer any changes from muslin to paper pattern. To learn why the paper pattern is transferred to a final oaktag sloper, and how to do this.

RELATED INFORMATION:

In transferring to the paper pattern any changes made on the muslin, it is important to recheck to be sure nothing has been omitted and all lines are trued. Mark all the changes made in the fitting of the muslin proof on the paper pattern. Since muslin tends to shift, it is best to develop the oaktag sloper from the corrected paper pattern. Check to see that all corresponding seams match in length; at present this involves only the side seam - for the shoulder seam, the back shoulder should have $\frac{1}{4}$" ease. All dart legs should be equal in length. Using your ruler, curved stick, and yardstick, true all lines.

PROCEDURE:

1. Place paper pattern on oaktag.
2. Secure it in position with weights or push pins.
3. Mark darts using a ruler and tracing wheel.
4. Mark seam stitching lines, using ruler and curve.
5. Mark short indenting lines showing notches for darts and seams.
6. Mark grainline.
7. Carefully cut oaktag sloper along seam lines with paper shears.
8. Using a notcher, make notches for darts and seam matchings.
9. Using an awl, mark dart point. (Usually $\frac{1}{8}$" from dart point, within the dart.)
10. Check cut lines for smoothness and accuracy.

This is your bodice basic sloper, which will be used in the styling of all of the waists covered in this book.

ASSIGNMENT:

1. Carefully transfer all changes made on muslin to paper pattern.
2. Copy corrected paper pattern onto oaktag.
3. Using Fig. 69, cut out the three pieces. Trace them on pattern paper, add the necessary seam allowances, pin the pieces to muslin, and cut out.
4. Check muslin (#3) on $\frac{1}{4}$-scale model form and make any necessary changes.
5. If needed, make a new $\frac{1}{4}$-scale sloper.

OBJECTIVE: To become familiar with the three major skills required for the designing and the development of original patterns.

RELATED INFORMATION:

Patternmaking is the art of manipulating and shaping a flat piece of fabric to conform to one or more curves of the feminine figure. Because the figure must be free to assume many different positions--to walk, sit, or run--the pattern must be designed with this thought in mind. The perfectly designed garment will be equally beautiful when the wearer is standing or sitting or in motion.

The study of patternmaking involves a combination of three major skills - all of which can be learned. A student of patternmaking must be prepared to practice carefully all of the work and should become self-critical. The three skills are:

1. Efficient use of technical methods of procedure for making the pattern with the use of a sloper. This knowledge is basic to the making of almost every pattern and with careful study and practice it is easily mastered.

2. Craftsmanship - the ability to do something accurately and neatly is essential in patternmaking. To some people this is a natural trait. In others it must be cultivated through constant practice and painstaking effort. The pattern designer must learn to work with speed and accuracy. A carelessly rendered pattern with symbols lacking or seam allowances carelessly measured may cost a manufacturer thousands of dollars. Cultivate precision with speed. Do not be too easily satisfied.

3. Artistry or design - applying the fundamental art principles of harmony, proportion, balance, rhythm, and emphasis both to structural parts and decorations. The study of historic costume in books and museums is necessary as well as acquaintance with modern ways of living. Serious study of textiles, fashion trends, the work of great designers, and fashion magazines will help to develop your style sense and ability to create new ideas.

ASSIGNMENT:

1. Clip pictures of designs which appeal to you for color, line, and detail.

2. Make five sketches of styles you've seen that you particularly like.

3. Working with the above pictures and sketches, answer the following questions:

    a. Where is the shaping? Is there one dart or several darts? Which are the decorative seams and which the control seams?

    b. Which are the important style lines? Where do they start and where do they end?

    c. Where is the straight grain?

    d. Are there any decorative features of special interest?

    e. What kind of neckline?

    f. What kinds of sleeves, if any? Are they short, long? set-in, kimono, raglan, dolman, fitted, puffed, full, cape?

UNIT III - WAISTS

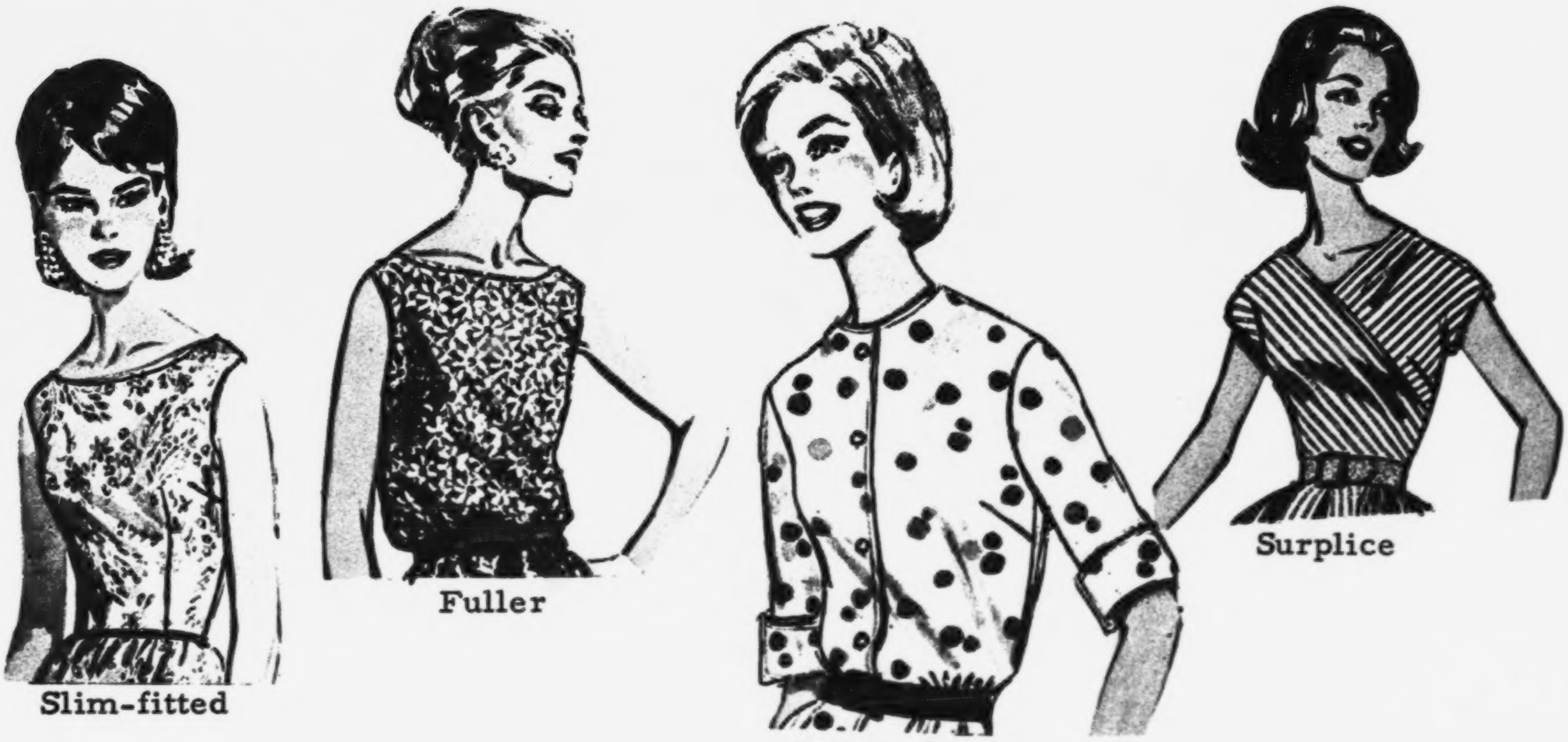
A. Introduction Lesson 1

OBJECTIVES: To become familiar with the basic types of waists.
To become familiar with the other names for waist.

RELATED INFORMATION:

The waist is the part of the garment covering the body from shoulder to waistline. It is usually called blouse or bodice. The waist area has fewer essential variations than skirts or sleeves have, except that it is elongated or shortened. For example, the brief, shirred bodice from the Empire period cancels the normal waistline. The long, unbroken expanse of skirt below gives the wearer a "long" appearance.

No matter what the fashion trend is regarding the position of the waist or the width of the shoulder, there are four main types of bodices. These are the slim-fitted bodice, the fuller bodice, the bodice that opens at the center-front, and the surplice, or lap-over bodice.



Slim-fitted

Fuller

Button-down

Surplice

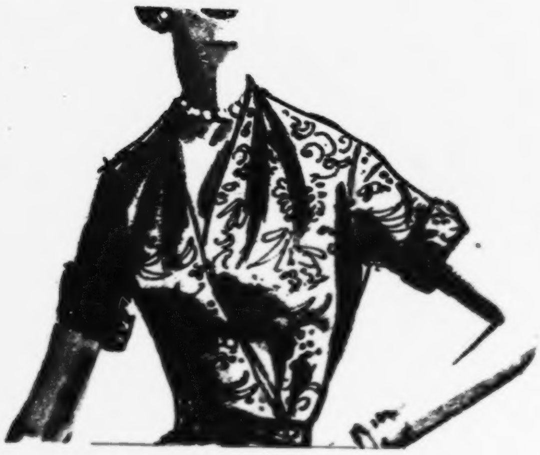
Fig. 78

Careful analysis of other designs will show that the variations exist in the treatment of the neckline, collar, or sleeve.

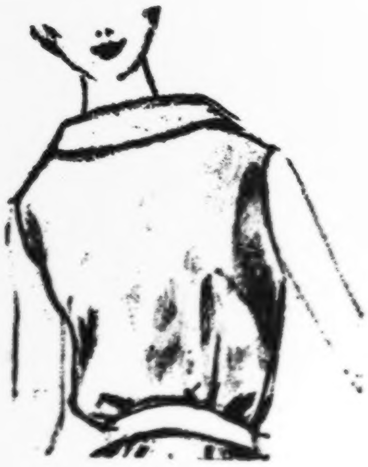
The fitted blouse is like the bodice sloper and may introduce darts in different positions, or tucks. The fuller blouse is cut straight down from the underarm; this is quite popular in the sweater suits or "pop-over" blouses, which may have darts for semifitting. A popular waist type is the button-down-the-front, that allows for button closing or any other method of fastening. When this bodice is closely fitted with gores or darts, it is known as the basque bodice. The closing of the surplice blouse forms a diagonal line across from one shoulder to the opposite waistline, thus producing a triangular section wider at the waist.

ASSIGNMENT:

1. Identify the following bodices according to the four basic types.



A. __________



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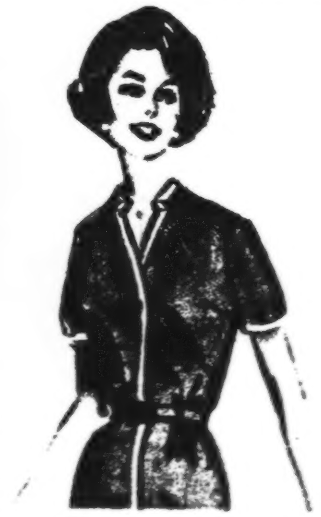

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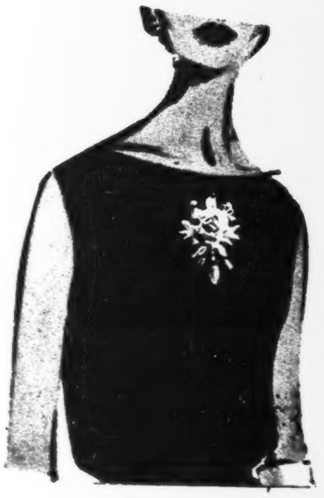

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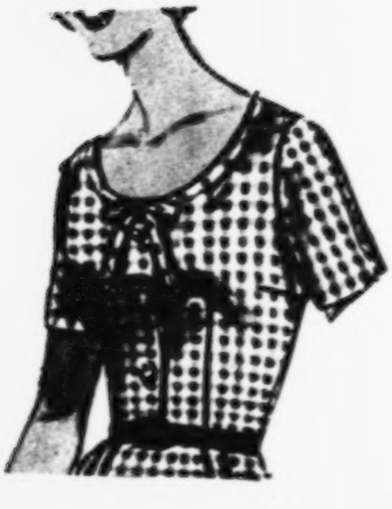

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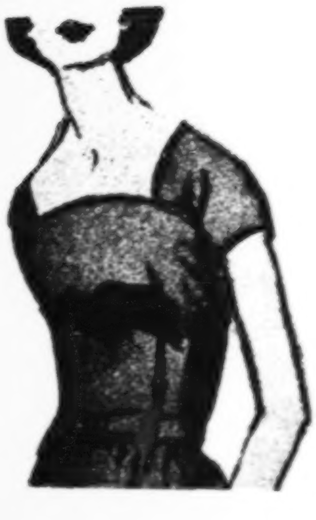
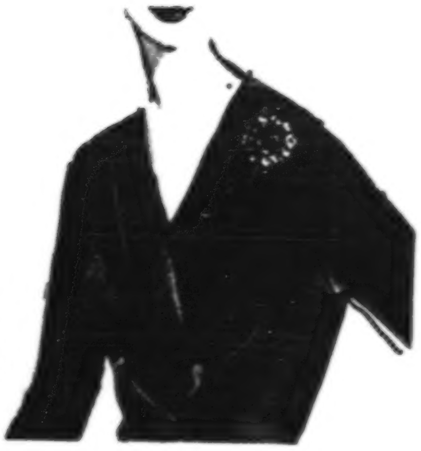
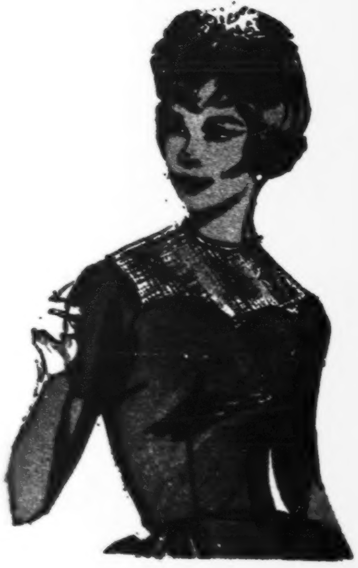


F. __________



G. __________



H. __________

Fig. 79

2. Collect pictures or sketches which show two variations of each of the four basic bodices.

B. Instruction for Darts — Lesson 2

OBJECTIVES: To review the necessity for darts.
To become familiar with table of lengths for darts.
To learn how to shorten darts.
To review the trueing of darts.

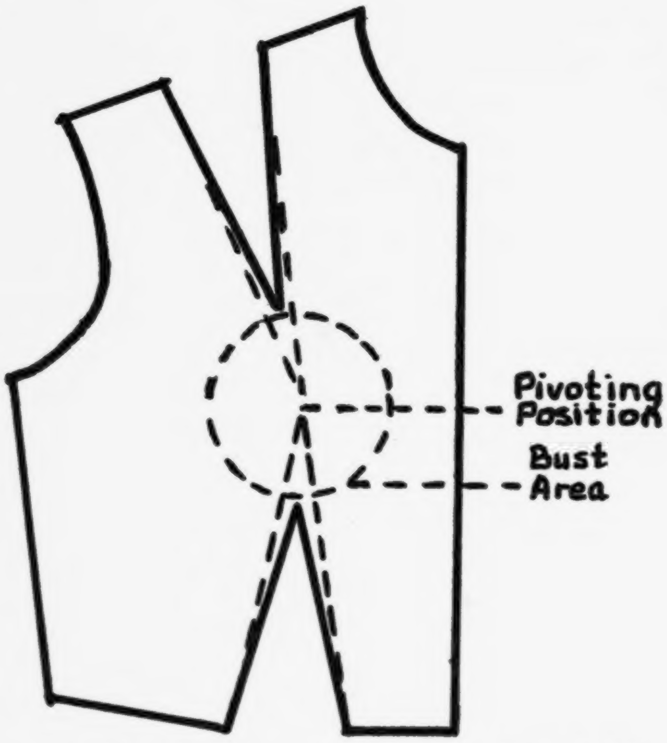
RELATED INFORMATION:

All garments are given fit and contour through carefully positioned darts, tucks, or gathers. The function of the darts is to shape the material to fit the curves of the body; they are used to take out fullness where it is not needed. Were it not for the shaping that these constructions give, our garments would be uncomfortable and bulky.

When darts are used only for fitting, they must be inconspicuous. Such a dart must be tapered gradually to a long, sharp point so that it blends into the garment. Darts are also used to accent the style lines of a garment. The placement of the dart depends upon the position to be accentuated. If the dart is twisted or carelessly made, the smooth surface covering the human form becomes wrinkled and misshapen. The part of the dart that points directly toward the point of the bust is the pivotal point of the dart and is the basis for changing the position of the dart.

All slashing, shifting, and division of darts are worked from the dart point. In working with the sloper, the dart point is also the pivoting point for changing the position of the dart. The new positions of the dart-leg ends are connected to the dart point.

The basic dart in the sloper is usually shortened from the dart point in the final pattern. The shortened dart provides a little extra ease, which is desirable in the final garment. This produces a softer effect and the garment is improved.



The darts can be shortened if desired by bringing them only to the bust area instead of to the pivoting position.

Fig. 80

The guide for the adjustment of final darts in a size 14 garment is listed below:

Waistline dart - front.	- Shorten according to need, by $\frac{1}{2}$" to 1" from the sloper dart point.
Waistline dart - back.	- Shorten to measure 6".
Underarm dart.	- Always found at bust-point height, shortened to measure 3".
Shoulder dart. - front.	- From any point on the shoulder seam to any point about 2" above the bust point.
French dart.	- Stitched to dart point or shortened according to need, by $\frac{1}{2}$" to 1" (for larger figures).
Elbow dart.	- Shortened to measure from $2\frac{1}{2}$" to 3".
Skirt-front dart.	- Shorten to measure 5".
Skirt-back dart.	- Shorten to measure 6".

These lengths are standard, but may be changed according to the type of garment produced.

PROCEDURE:

After a draft has been made, the dart is then shortened. To shorten the dart, locate the new dart point at the desired length in the center of the space. Mark position. Draw new dart legs from the original starting place to the new position of the dart point. Dart legs must always be equal in length.

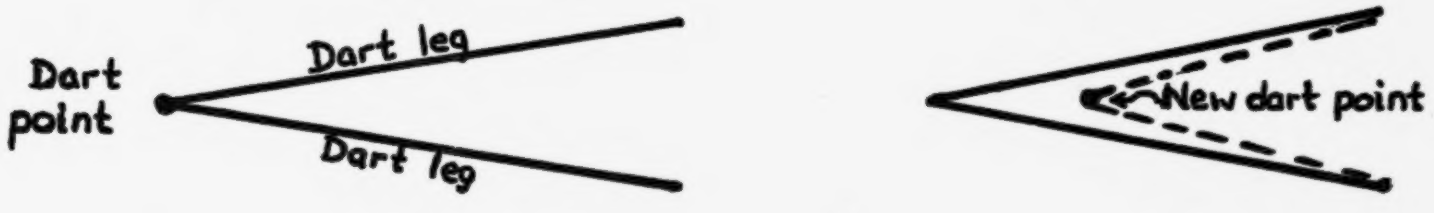


Fig. 81

Once the dart has been shortened, it must be trued. (See Unit II, Lesson 3.)

ASSIGNMENT:

Questions:

1. What is a dart?
2. Why do dart positions have to be changed?
3. What occurs when the dart legs are carelessly sewn?
4. What is the pivotal point of a dart?
5. What advantage is gained by the use of darts?

I. Practice shortening the darts in your basic sloper.

II. Shorten the following darts as marked.

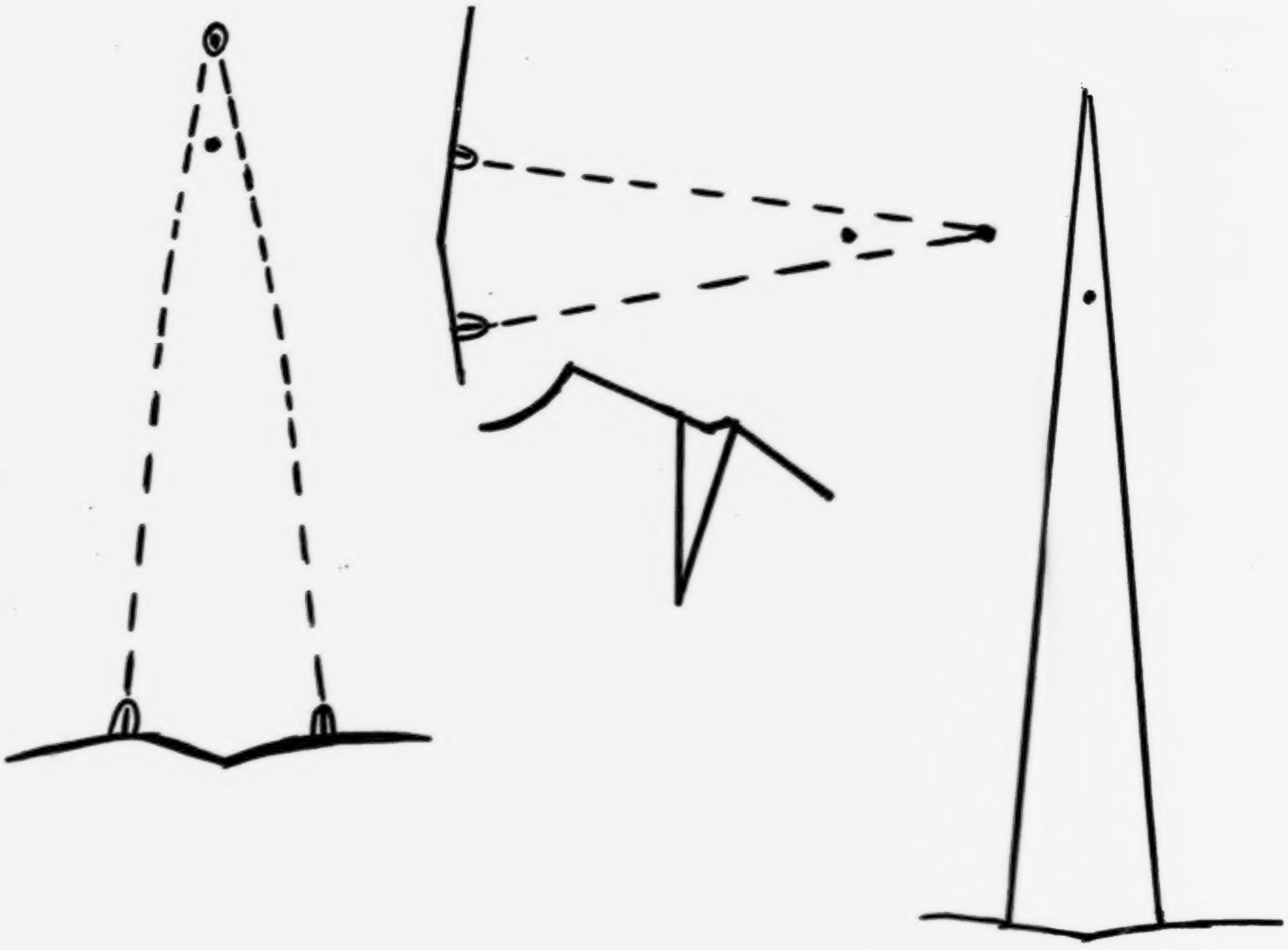


Fig. 82

UNIT III - WAISTS

C. Dart Manipulation

Methods Used in Dart Manipulation in the Front Bodice — Lesson 3

OBJECTIVES: To understand the principles of dart control.
To become familiar with the two methods used in dart manipulation.

RELATED INFORMATION:

The female figure is three dimensional, with further variations of curves, both concave and convex. One flat piece of material must be worked to accommodate the high points and at the same time the adjoining, smaller areas that require less material. Whenever there is a high point, such as the bust, and a smaller adjacent area, such as the waist, there will be a dart or some other control to provide fabric where it is needed and eliminate excess fabric where it is not needed.

The bodice-front sloper has a high, round neck, an armhole for a set-in sleeve, and a dart at the waistline. In the flat-front bodice sloper pattern, the basic or fundamental dart at the waist allows for the fullness needed at the bust and at the same time takes in the extra material at the waist. The material is stitched to take in the amount needed to make it fit the smaller dimension; as it tapers off toward the high point, it releases enough material to fit the larger dimension.

The amount of the dart control is constant, but the position of the dart may be changed. Shifting the basic dart from one position to another does not change the fit of the garment; it merely changes the shape of the pattern piece.

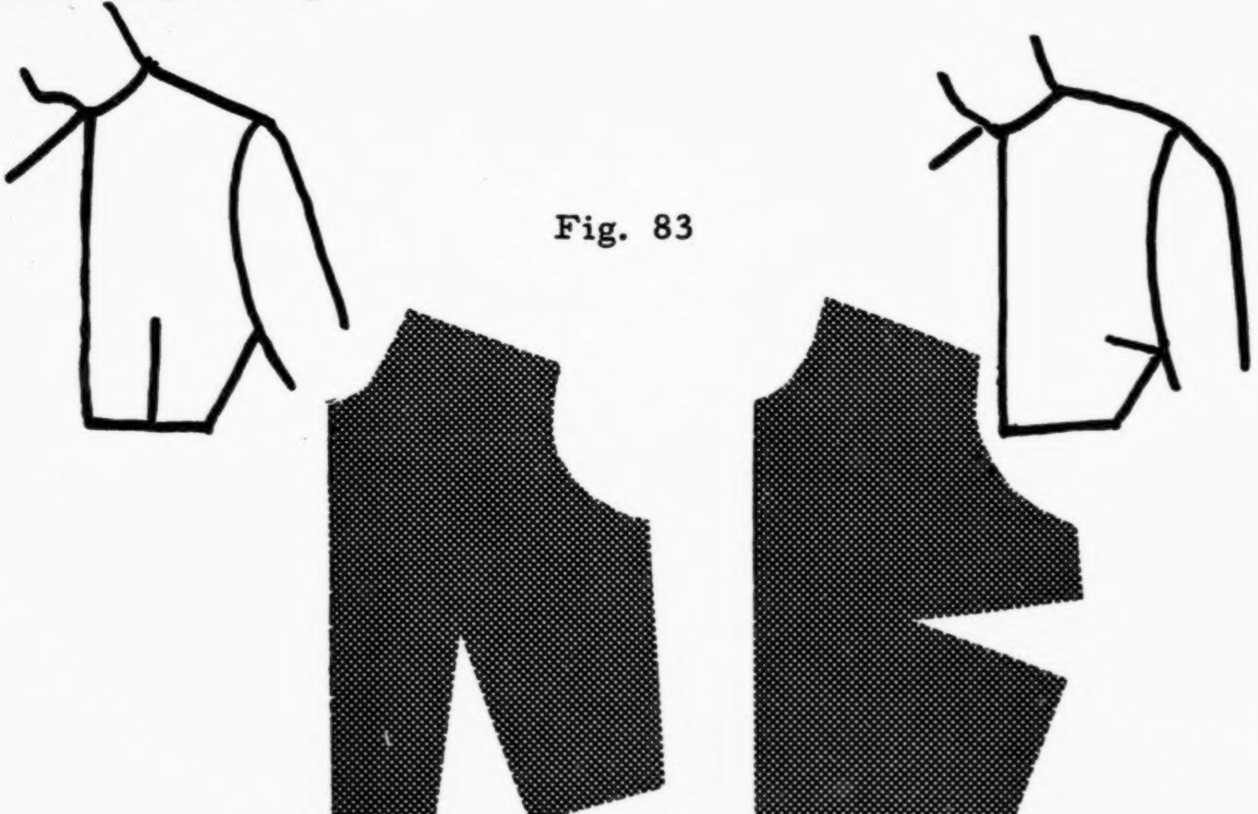
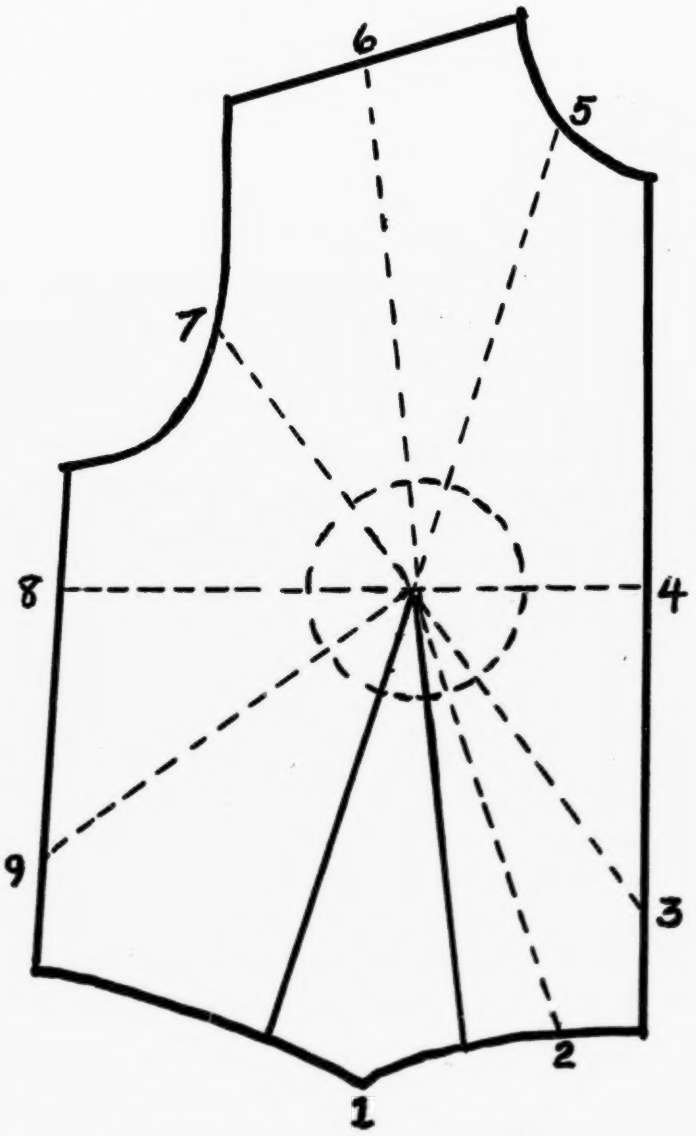


Fig. 83

Darts, no matter what their position, must converge at the apex or peak of the bust. The point of the dart is the pivoting point for all dart manipulation. In designing, dart control can come from various positions on the sloper to change the design or style of garment. Some darts are more flattering to a particular figure than others. A few of the most popular dart positions used in designing are marked with numbers on the sketch in Fig. 84.

1. waistline
2. waistline, closer to center-front
3. center-front near waistline
4. center-front
5. neck
6. shoulder
7. armhole
8. underarm
9. French-2" above the waistline on the underarm seam



The dotted circle outlines the average bust area, a circle with radius of approximately 2" from the center-pivoting point.

Fig. 84

PROCEDURE:

There are two methods by which dart manipulation can be accomplished:

1. The pivot method
2. The slash method

Although the pivot method may appear more intricate to the beginner, when the principle has been fully understood, the method is faster and the results more accurate. For developing greater skill and understanding of dart manipulation, it is suggested that you develop all patterns using both methods.

1. The Pivot Method

The pivot method used for dart manipulation is also known as "swinging the dart". The dart is swung from one position to another, using the pivoting point marked on the sloper, that is, the point (top) of the dart.
Example: Shifting the waistline dart to the underarm dart.

1. Establish position of the underarm dart (on the sloper) by squaring a line from center-front across pivoting point to underarm seam. (A)
2. Using pattern paper and front bodice sloper, start at (A), trace sloper around the armhole, shoulder, neckline, down center-front, and around to waistline dart. Crossmark position B.
3. Hold sloper at pivoting point (using pencil). Pivot sloper until (C) meets (B). This will close the waistline dart.
4. Draw remainder of waistline and underarm seam back to (A). Crossmark position. (There will be a space between starting point (A) and finishing point (A).
5. Remove sloper. Draw underarm dart by connecting the two crossmarks (A) to pivoting point.
6. Underarm dart (bustline dart) is usually shortened $\frac{3}{4}$" to $1\frac{1}{2}$".
7. Shorten underarm dart $\frac{3}{4}$". Measure in $\frac{3}{4}$" from pivoting position. Redraw dart, connecting new end of dart to crossmarks (A).
8. True dart. Dart must be closed and cupped to be sure length is not lost on the dart seamline. Trace through dart along fold at seamline.
9. Establish lengthwise grain parallel to center-front of waist.
10. Add correct seam allowance.
11. Label pattern piece as to size and number of pieces needed.

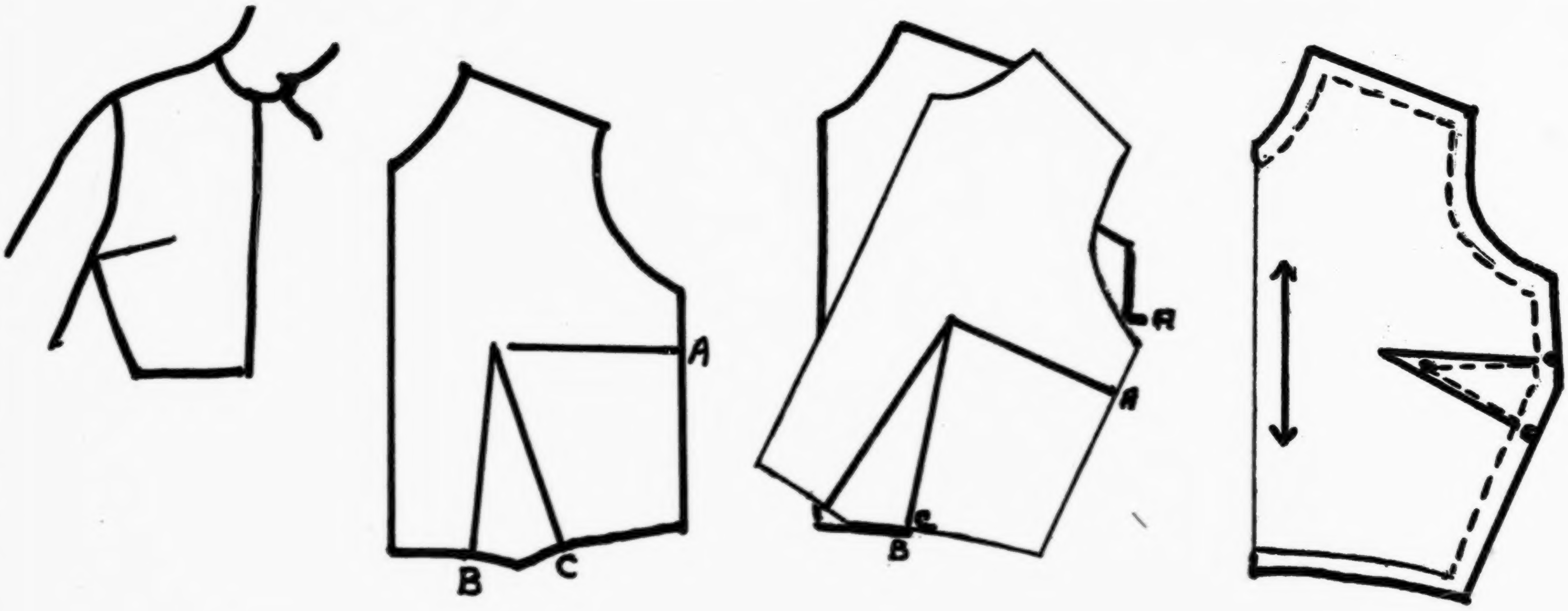


Fig. 85

2. The Slash-and-Spread Method

In using the slash-and-spread method, the dart is shifted from one position to another by using scissors to cut certain areas of the sloper tracing so that it can be spread to be used in other areas. Example: Shifting the waistline dart to the shoulder dart.

1. Trace the front sloper on pattern paper.
2. Be sure to mark the waistline dart.
3. Locate the center of the shoulder seam and mark this point (A). (This is usually placed in the center of the shoulder but may be placed where it would be the most becoming in the design.)
4. Draw a line connecting point (A) (center of shoulder seam) to bust point (B) (point of dart).
5. Cut out the complete tracing; slash along the legs of the dart and remove the dart area.
6. Slash along the line from shoulder to dart.
7. Close the original dart (waistline dart) by either pinning onto another piece of paper or by scotch-taping it.
8. This automatically shifts the control from the waist to the shoulder. The shoulder dart opens wider than the waist dart because the distance from the center of the bust to the shoulder is longer than to the waist.
   Note: The shoulder dart looks better on the figure if it ends $\frac{3}{4}''$ above the bust point. However, the single shoulder dart is seldom used, as this distorts the grain line of the underarm seam and of the armhole. It is usually narrowed and used in pairs or with a waistline dart.
9. True seam and dart lines.
10. Add correct seam allowance and label pattern.

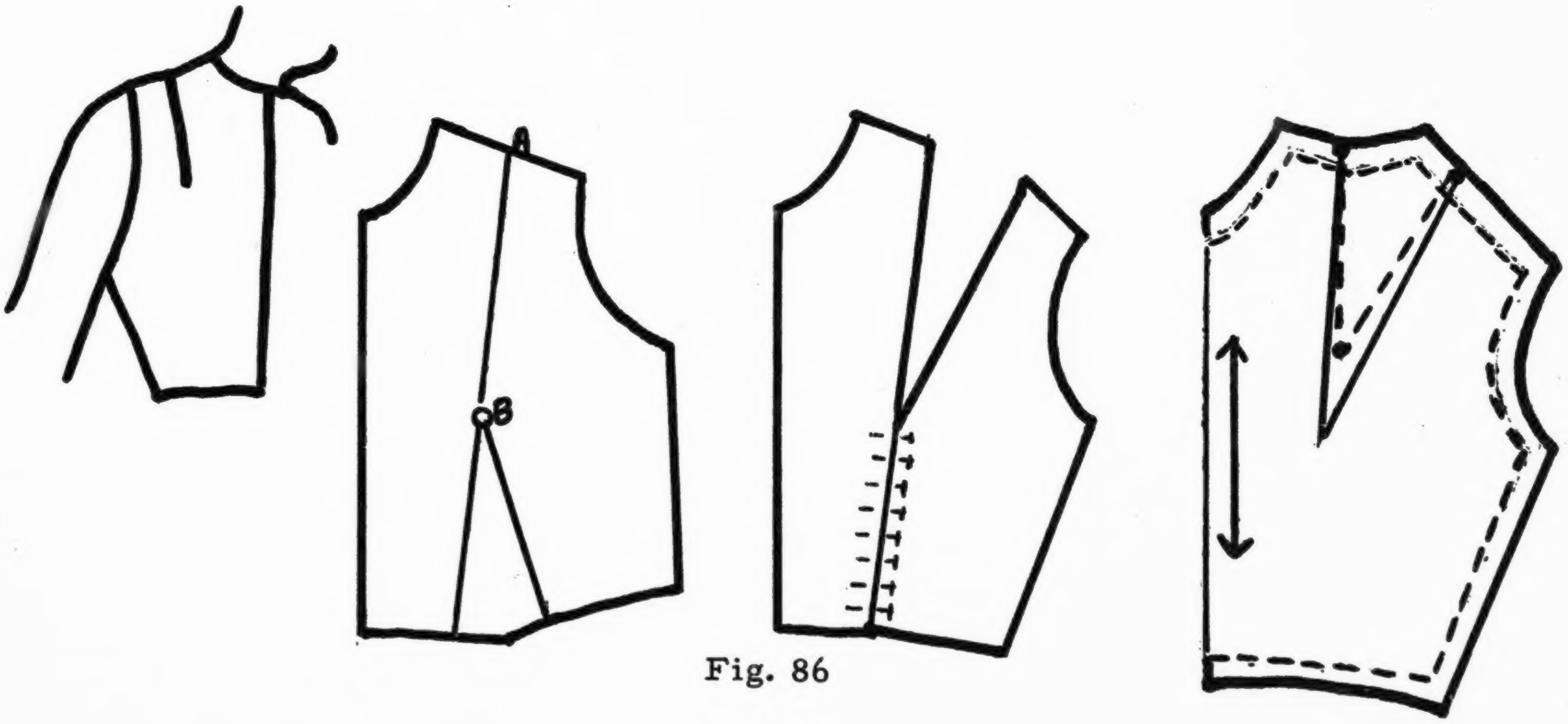


Fig. 86

ASSIGNMENT:

1. Execute examples A and B using both methods for each.
2. From magazines and pattern books collect sketches of blouses illustrating various arrangements of simple darts.
3. Select one of your collection or one chosen by the teacher. Develop it using both methods of dart manipulation.
4. Write step-by-step directions for executing each.

C. Dart Manipulation

Shifting Basic Waistline Dart to Neck and French Dart — Lesson 4

OBJECTIVES: To review popular dart positions used in designing.
To learn how to shift the basic dart to other positions on the bodice front.
To experiment with other positions found through the use of trade newspapers, magazines and books.

RELATED INFORMATION:

The basic (waistline) dart is used not only for controlling fullness but for styling the garment. Through the use of dart manipulation, styles can be changed. Furthermore, in the use of different fabrics, darts in certain positions may have to be shifted to a different position in order to create better design, e. g., as with plaids or stripes.

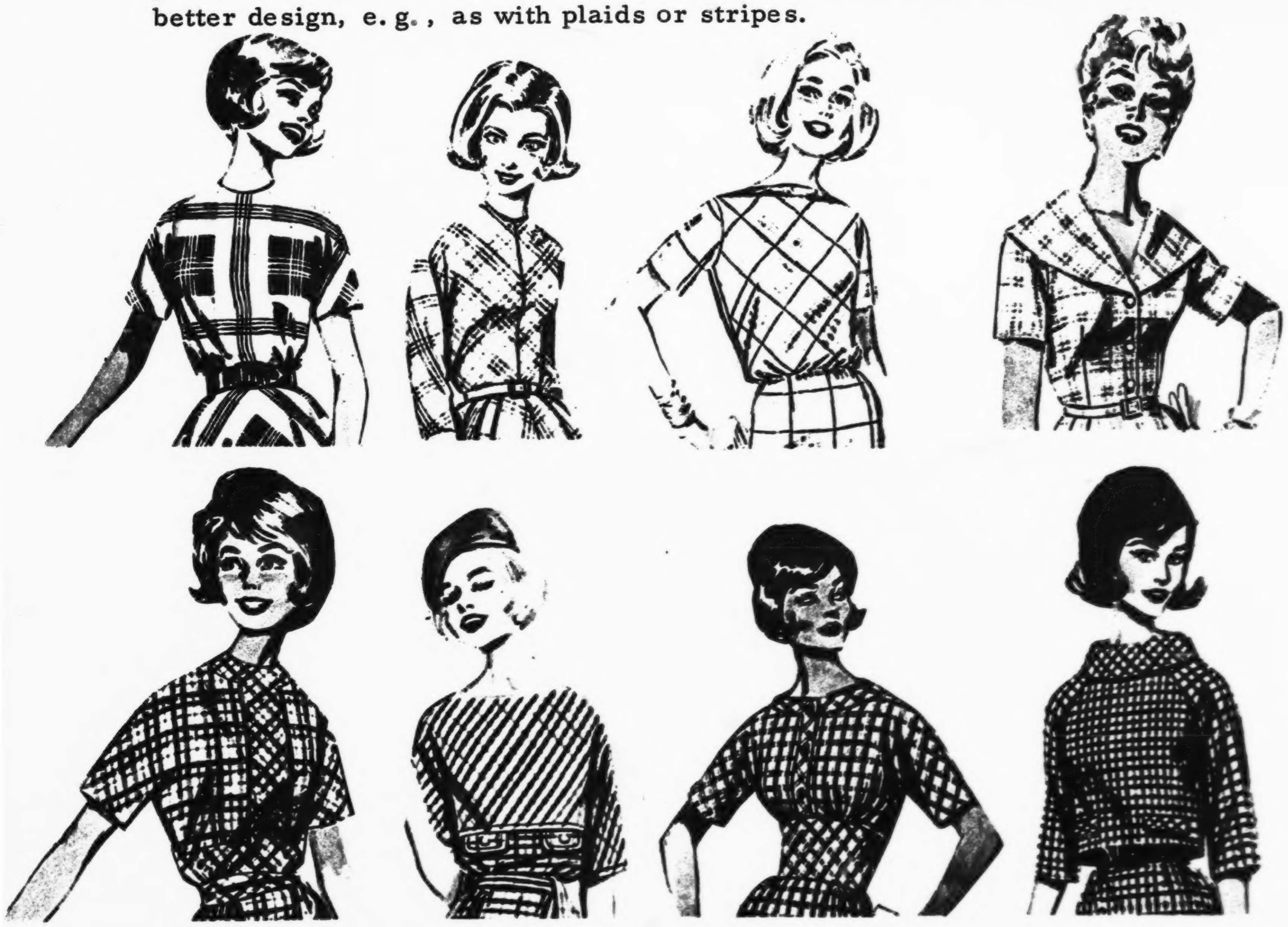


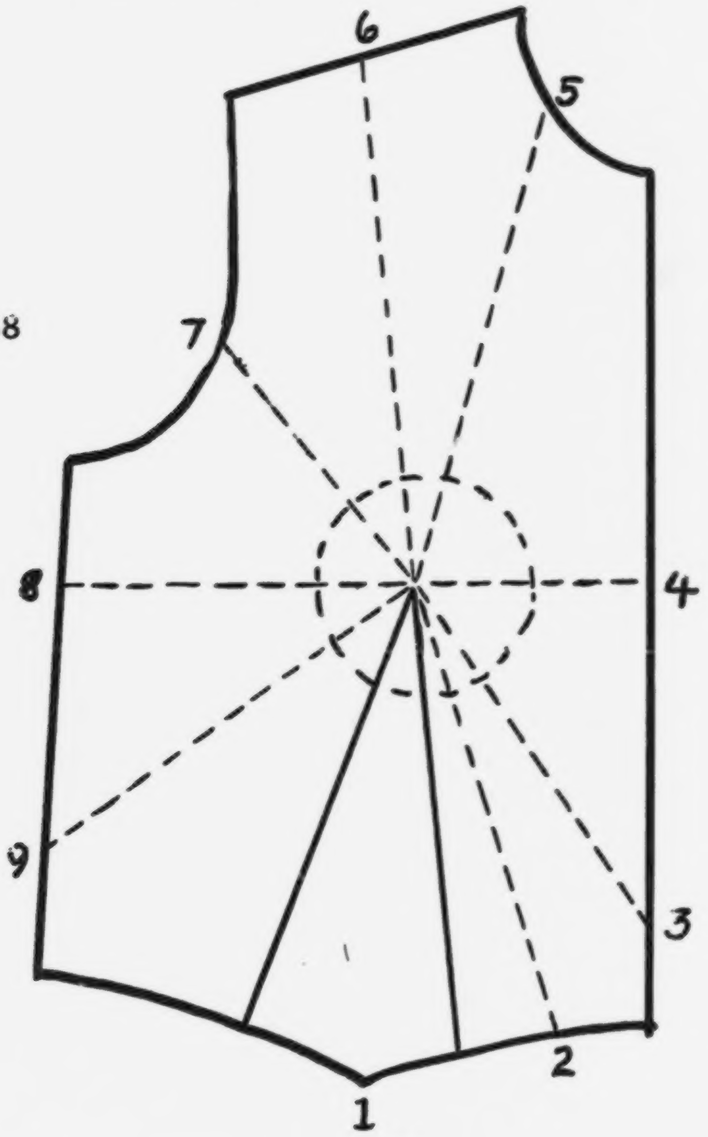
Fig. 87

The most popular positions are reprinted here in sketch below:

1. waistline
2. waistline, closer to center-front
3. center-front near waistline
4. center-front
5. neck
6. shoulder
7. armhole
8. underarm
9. French-2" above the waistline on the underarm seam

Using the pivot- (the swinging-the-dart) method, we will do the neck dart and the French dart.

Fig. 88



PROCEDURE:

Example A. Neck dart

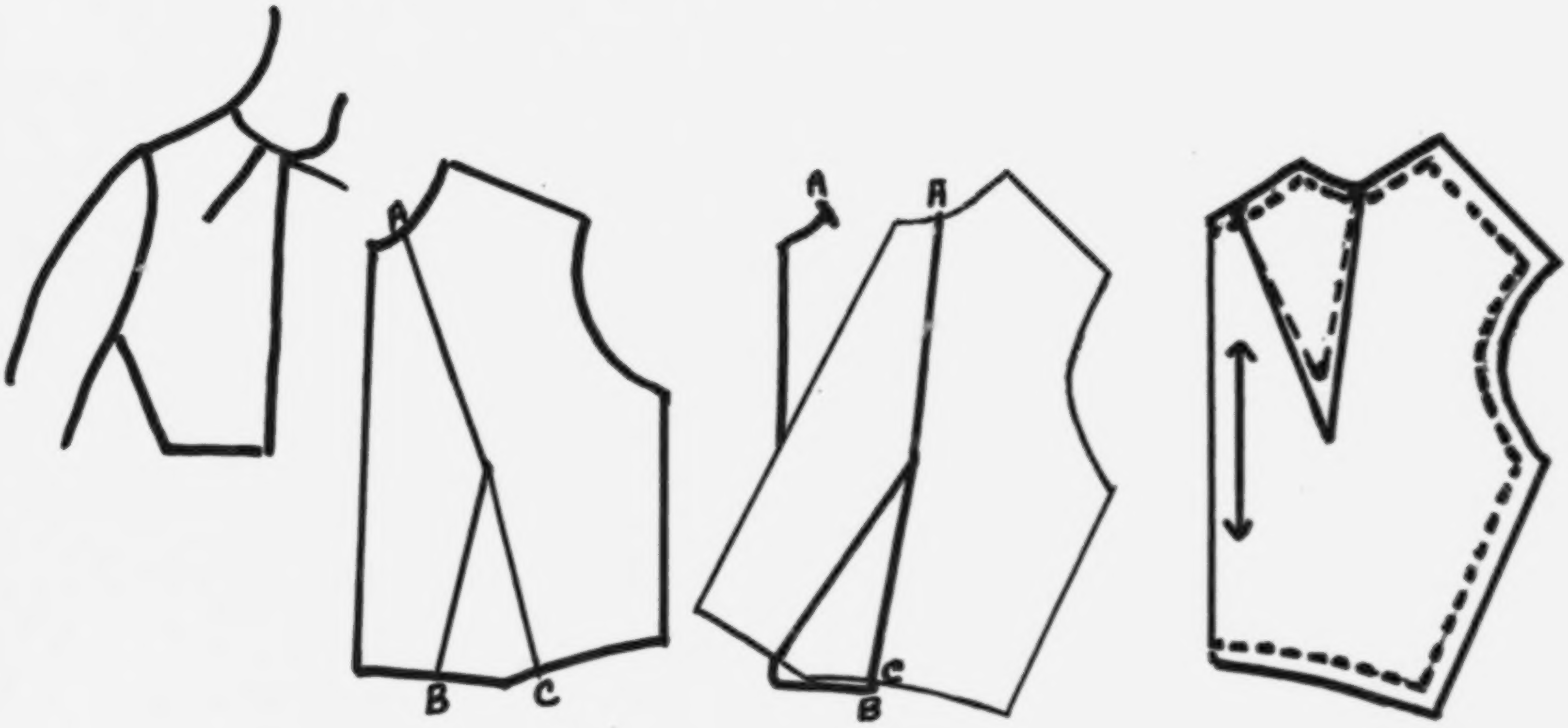


Fig. 89

1. This dart may be placed at any position on the neckline consistent with an attractive line.
2. Establish position of the neckline dart (position (A). Crossmark.
3. Starting at (A), trace sloper around neck to center-front, across waistline to position (B).
4. Holding sloper at pivoting point (using a pencil or push-pin), pivot sloper until (C) meets (B).
5. Draw remainder of waistline, underarm seam, armhole, shoulder and back to position (A). Crossmark position.
6. Remove sloper. Draw neckline dart by connecting the two crossmarks (A) to pivoting point.
7. Neckline dart may be shortened $1\frac{5}{8}''$. Measure in $1\frac{5}{8}''$ from pivoting position. Redraw dart, connecting new end of dart to crossmarks (A).
8. True dart, folding dart from center over to side.
9. Establish lengthwise grain parallel to center-front of waist.
10. Add seam allowance and label pattern pieces.

Example B. French dart

In the previous lesson, you shortened the underarm dart to make it less conspicuous. A great many experienced designers place the control dart under the arm, but at an angle pointing upward towards the bust, rather than across to it.

Because this plan was introduced by the French designers, it has been called the French dart. This position makes it less conspicuous and at the same time, from a profile view, flatters the wearer, as it creates the illusion of her having a higher bustline than she may have.

This type of dart is seldom used as a basis for developing new designs. It is a design in itself.

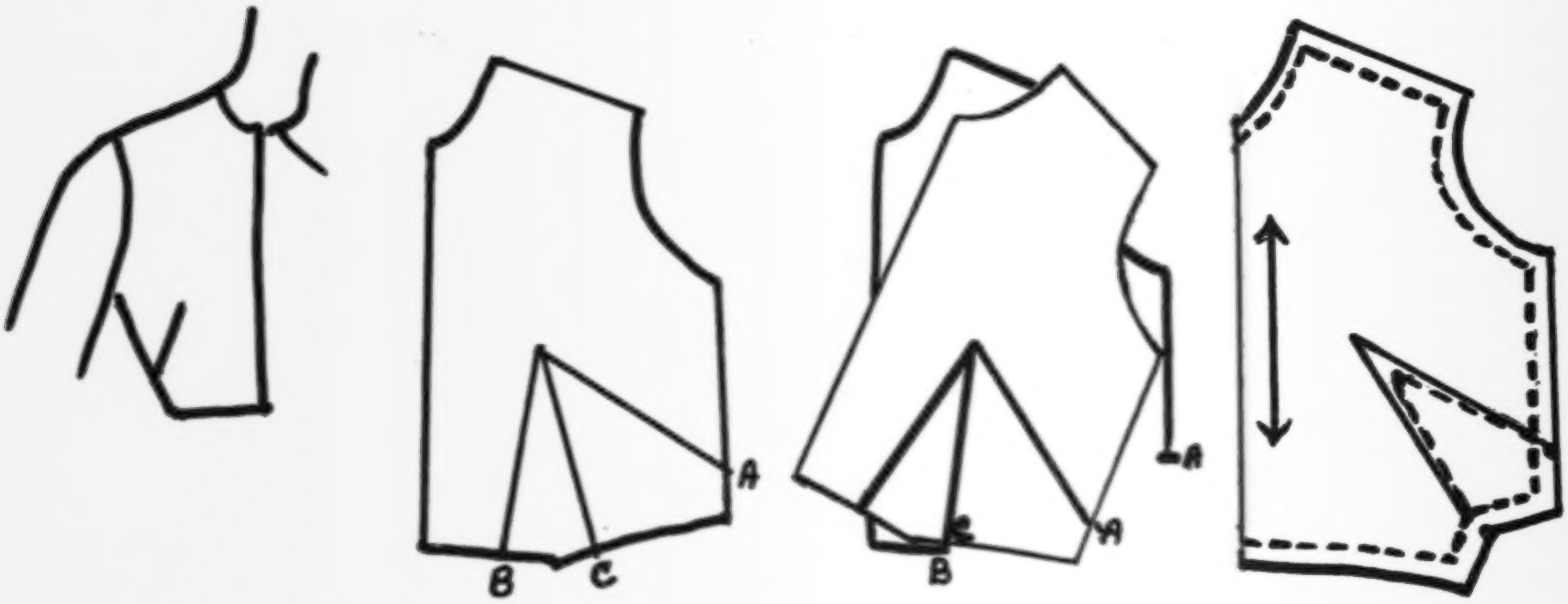


Fig. 90

1. Establish the position of the French dart (position (A). Crossmark.
2. Starting at A, as before, trace sloper up underarm seam, armhole, shoulder, neck, center-front, and waistline as far as position (B).
3. Hold sloper at pivoting point (using a pencil or push-pin) and pivot until point (C) meets (B).
4. Draw remainder of waistline and underarm seam. Crossmark position.
5. Remove sloper. Draw French dart by connecting the two crossmarks (A) to pivoting point. Shorten dart by ½ inch.
6. True dart, folding dart down.
7. Establish lengthwise grain at center-front.
8. Add seam allowance and label pattern pieces.

Note: Compare the underarm seam in your muslin bodice (with its underarm dart) with the underarm seam using the French dart. Note the resulting change in the grain of the fabric in the latter. The grain in the French-dart sample is straighter at the side seam. Many designers feel that the garment will retain its shape longer when the French dart is used.

ASSIGNMENT:

1. Develop both patterns in the above examples.
2. Develop patterns with two different neckline dart positions.
3. Develop two patterns with different French dart positions.
4. Collect three sketches of blouses using neckline darts, and three using French darts.

UNIT III - WAISTS

C. Dart Manipulation
Shifting Basic Dart to Other Positions — Lesson 5

OBJECTIVES: To shift the basic dart to the center-front position.
To shift the basic dart to the armhole position.
To shift the basic dart to other positions on the center-front.

ASSIGNMENT:

Using the information on dart manipulation (Unit III, B and C) and the sketches below, work out the following assignments:

A. Shift basic dart to the center-front position (Fig. 91).

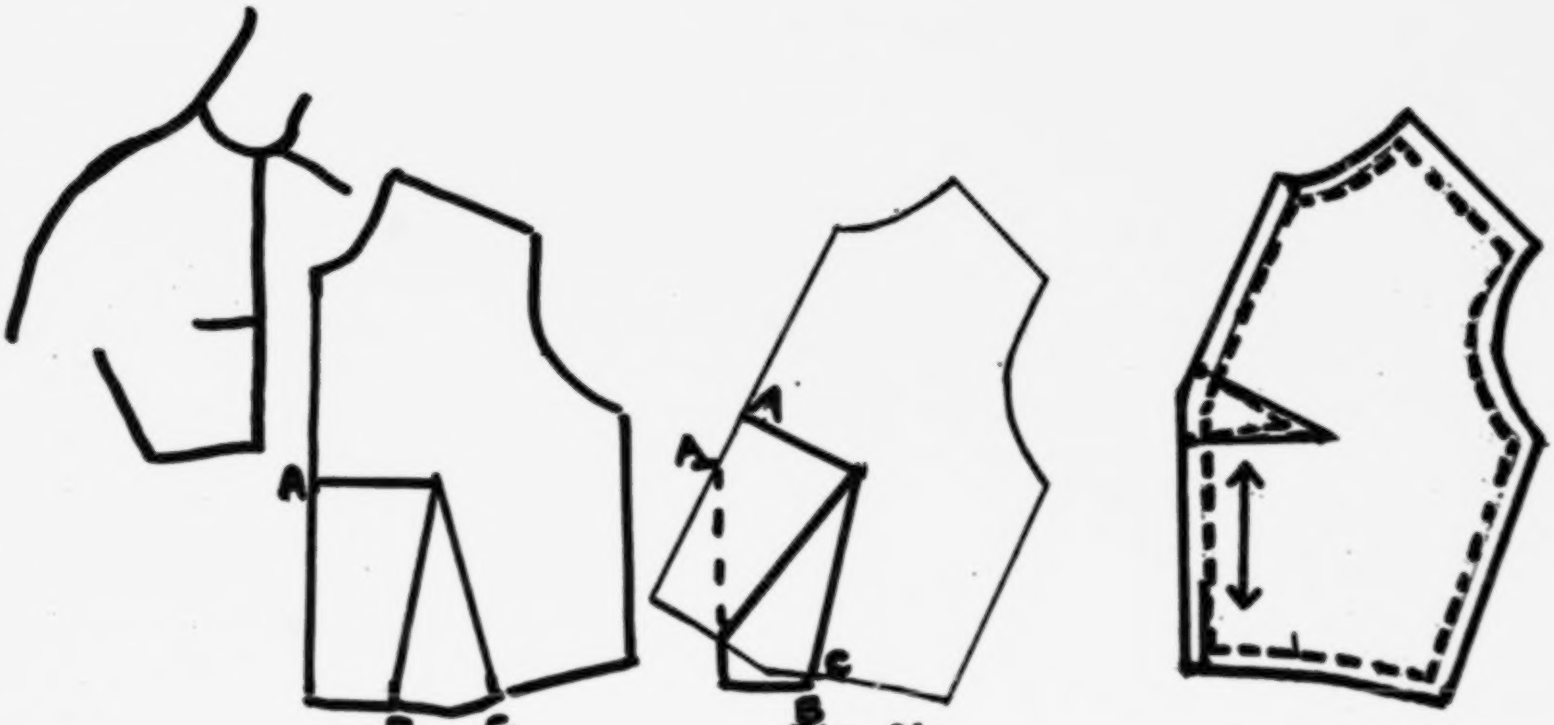


Fig. 91

B. Shift basic dart to the armhole position (Fig. 92).

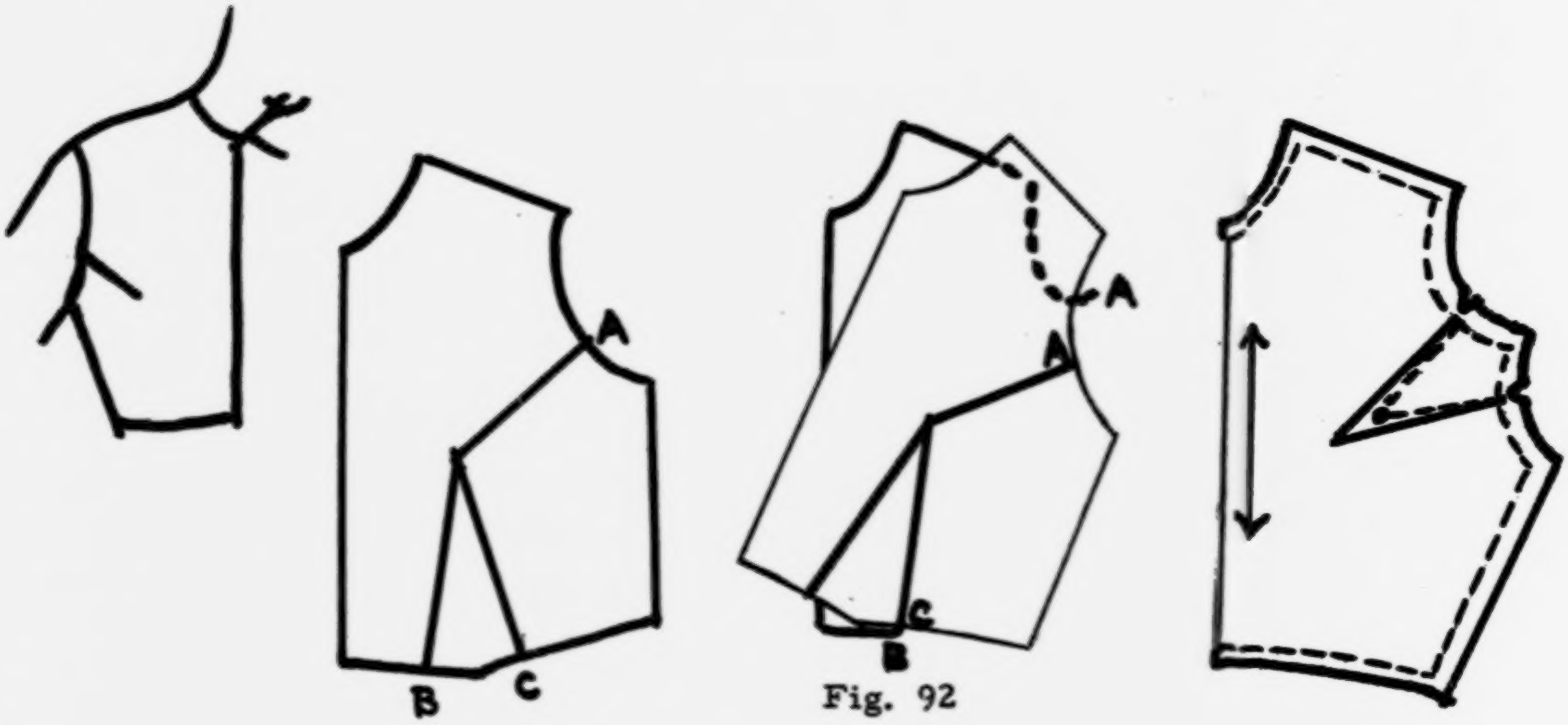


Fig. 92

C. Shift the basic dart to another position on the center-front.

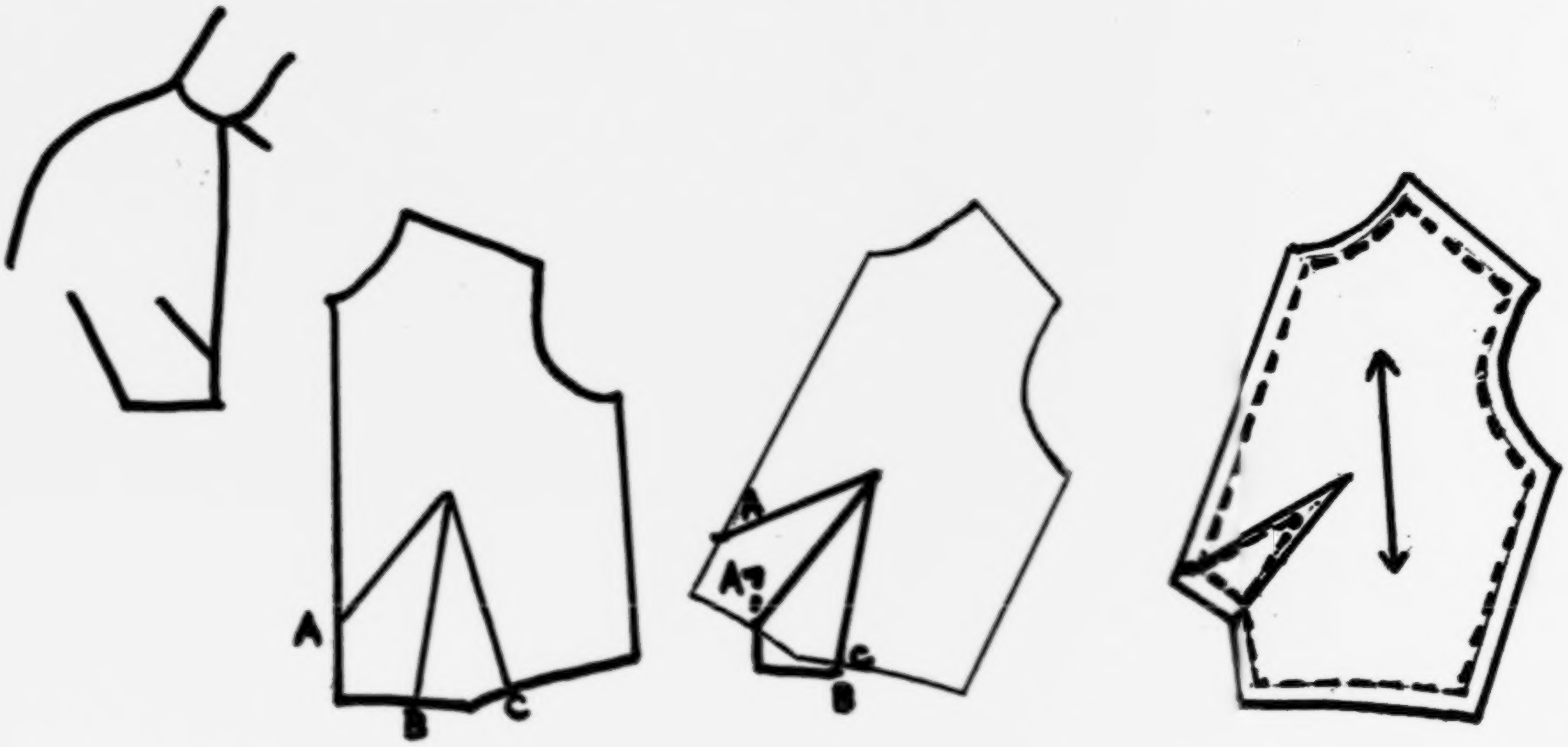


Fig. 93

Note: Develop all three patterns using both the pivot method and the slash-and-spread method.

DIVISION OF DARTS

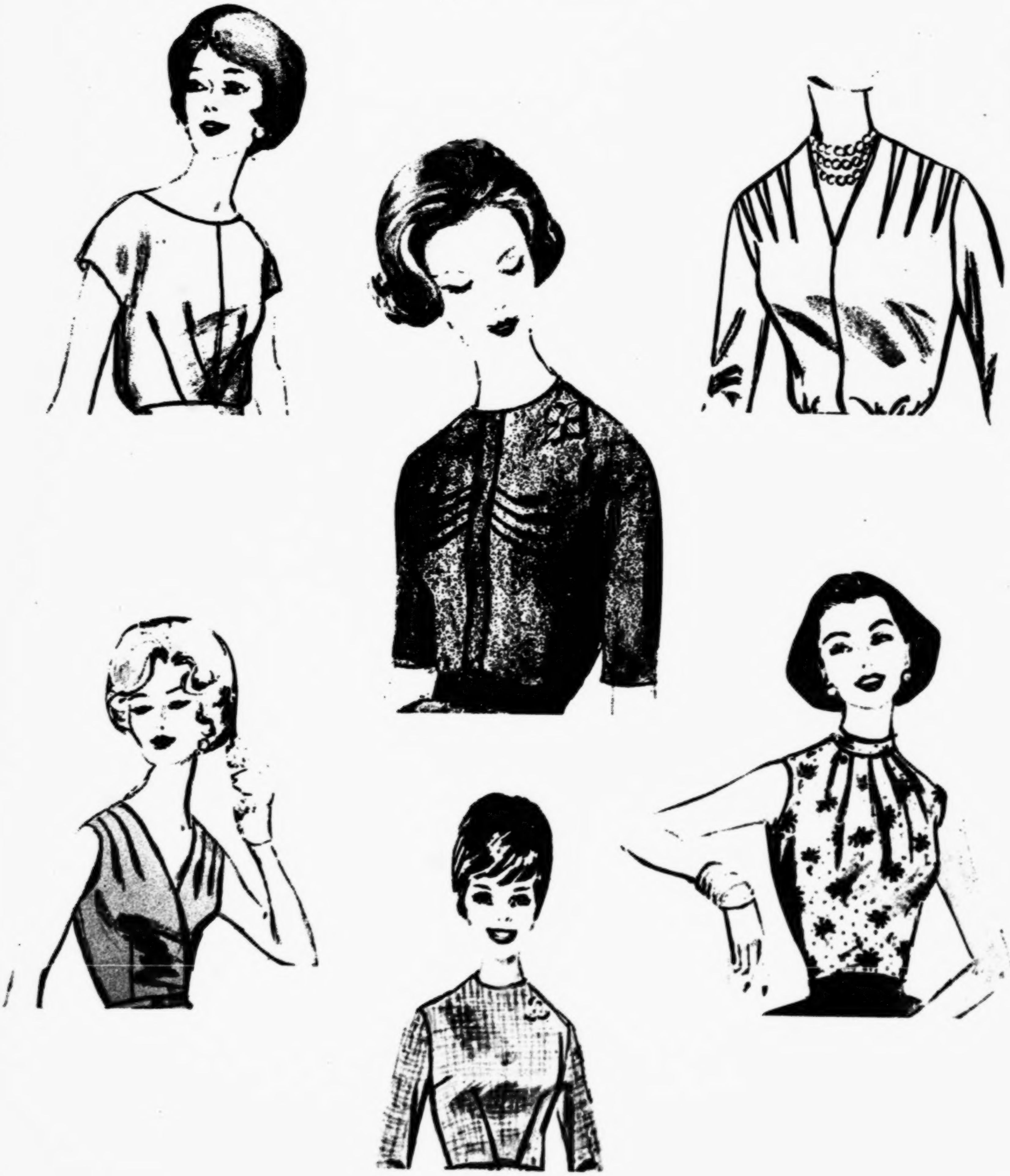


Fig. 94

D. Division of Darts

Dividing the Dart Control — Lesson 6

OBJECTIVES: To learn how to divide the basic dart control.
To become familiar with the most popular divisions of the basic dart control.

RELATED INFORMATION:

In the previous lessons, the entire dart was shifted by "swinging the dart" from the basic waist dart to other areas. When designing garments for individuals who are not fortunate enough to have perfect proportions, the size of the dart might be unnecessarily large and the distorting stripes or patterns would become increasingly unpleasant. In most designs, one dart is seldom used for controlling fullness. More often the dart control is divided--placing a portion of it extending from one seam and the remainder from another (Fig. 94). "Control" is merely a term used to refer to the means which are employed to shape the fabric to conform to the curves of the body.

The most popular divisions of the dart control are between waistline and underarm, or waistline and shoulder. Any amount of the original dart can be "swung" into another position on the pattern as long as the additional dart starts on a seam line and is directed to the peak of the bust. The amount of dart control remains the same, but the shape of the pattern piece is changed. Once you have become familiar with the many ways in which control may be provided, you will readily see the possibilities for distribution of the control to insure the best "hang" to the fabric. Fig. 94 illustrates several different ways of doing this.

PROCEDURE:

Example A. Dividing the control between the waistline and underarm dart.

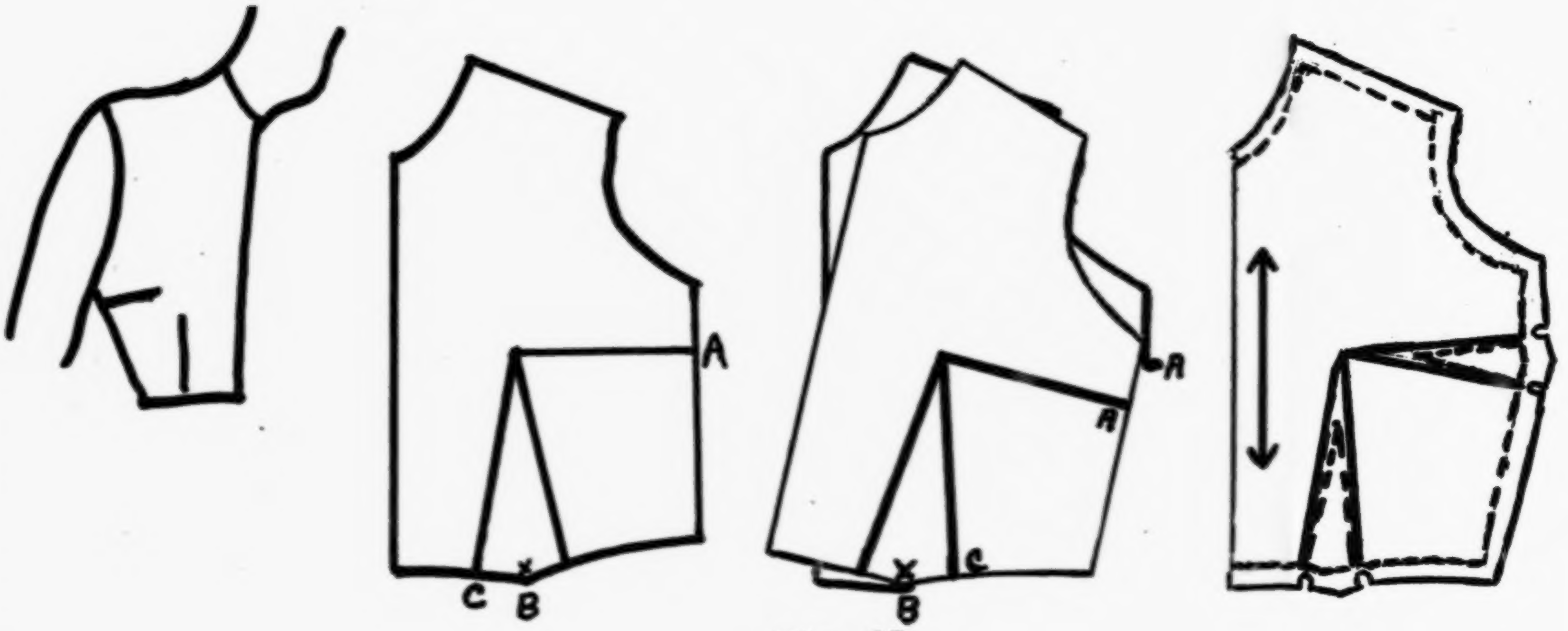


Fig. 95

1. Establish position of the underarm dart and crossmark (A) two inches below armhole.
2. Crossmark the center of the waist dart on sloper (B).
3. Starting at (A), trace sloper around armhole, shoulder, neck, center-front, and as far as the front notch of the waistline dart (B).
4. Holding sloper at pivoting point, swing sloper so that the center of the waist dart (B) meets the front notch of the waist dart (C).
5. Be sure to mark the pivoting position.
6. This divides the waist dart so that half of the dart is now at the underarm position, and half remains at the waistline.
7. Starting at the center-dart position (B), trace around the waistline and side to underarm mark (A). Crossmark.
8. Remove sloper. Form darts by connecting new markings at waist and underarm to pivoting point.
9. Shorten darts as previously instructed.
10. Establish lengthwise grain parallel to center-front.
11. To true darts, fold the darts in the position they will be pressed--down for underarm dart, toward center for waistline dart. Use tracing wheel for trueing dart. Draw new seamline at waist and underarm.
12. Complete pattern.

Example B. Dividing the control between waistline and shoulder dart.

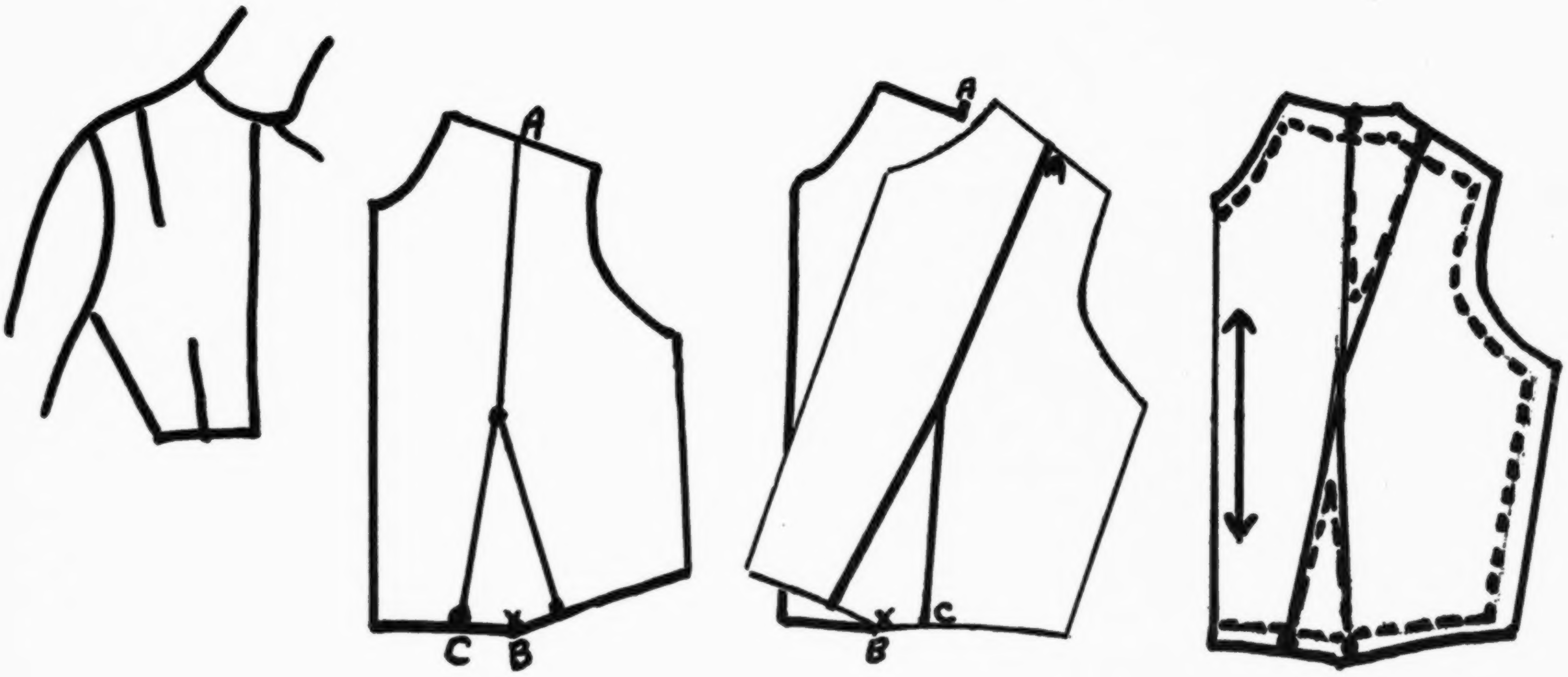


Fig. 96

1. Establish position of shoulder dart (A) midway between neck and armhole.
2. Mark the center of the waist dart on sloper (B).
3. Starting at (A), trace sloper around to front notch of the waistline dart (B).
4. Holding sloper at pivoting point, swing sloper so that the mark for center of waist dart (B) meets (C).
5. Be sure to mark pivoting position.
6. This divides the waist dart so that half of the dart is now at the shoulder position, the other half remaining at the waistline.
7. Starting at the center-dart position, trace around the waistline, side, armhole, and up to shoulder position (A).
8. Be sure to mark all four positions for the new darts.
9. Remove sloper. Form darts by connecting new markings at waist and shoulder to pivoting point.
10. Shorten darts as previously instructed.
11. Fold the darts closed in the position they will be pressed--toward center for both darts. Use tracing wheel for trueing darts. Draw new seamline at waist and shoulder.
12. Complete pattern by adding seam allowance and marking grain line and notches.

ASSIGNMENT:

1. Develop bodice-front patterns for the division-of-control dart, between (a) waist and underarm (b) waist and shoulder.

2. Collect sketches of bodice fronts using the darts in Question 1.

3. Using the sketches below, develop bodice-front patterns for the following divisions:

   a. waist and neck (Fig. 97).
   b. waist and armhole (Fig. 98).

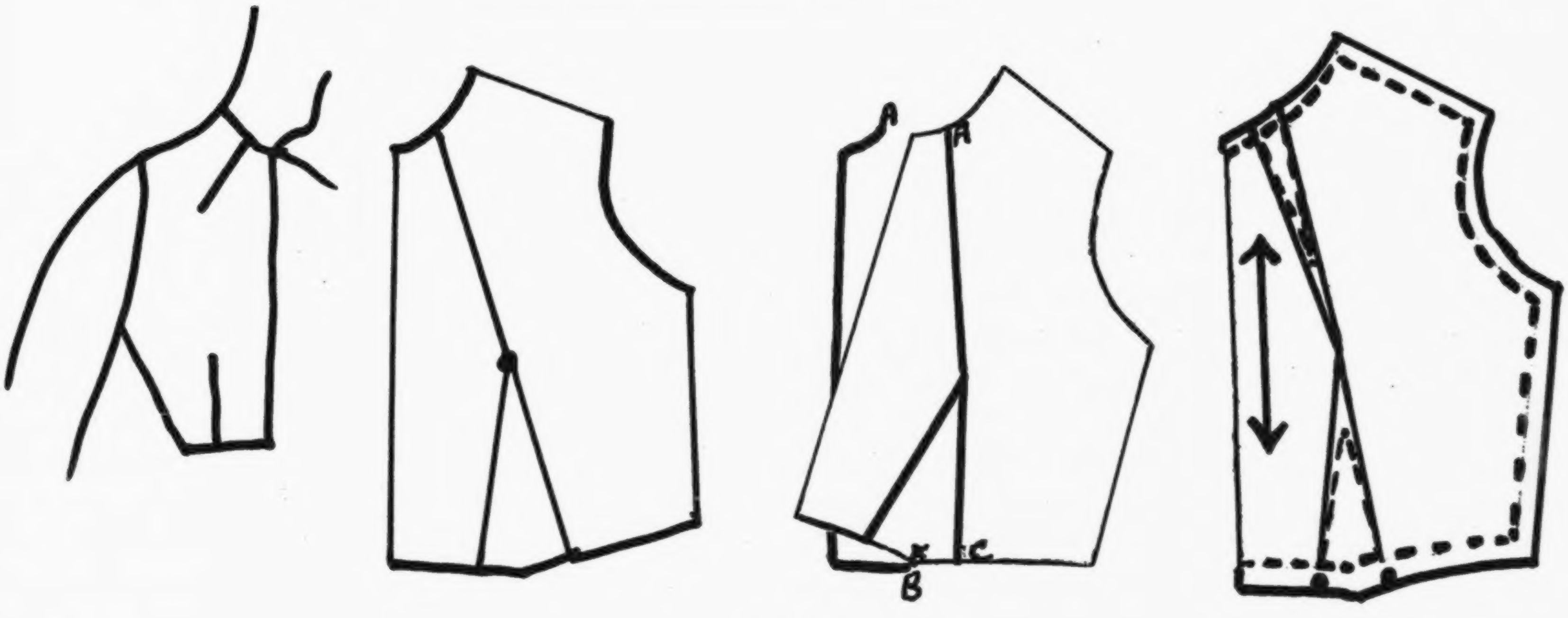


Fig. 97

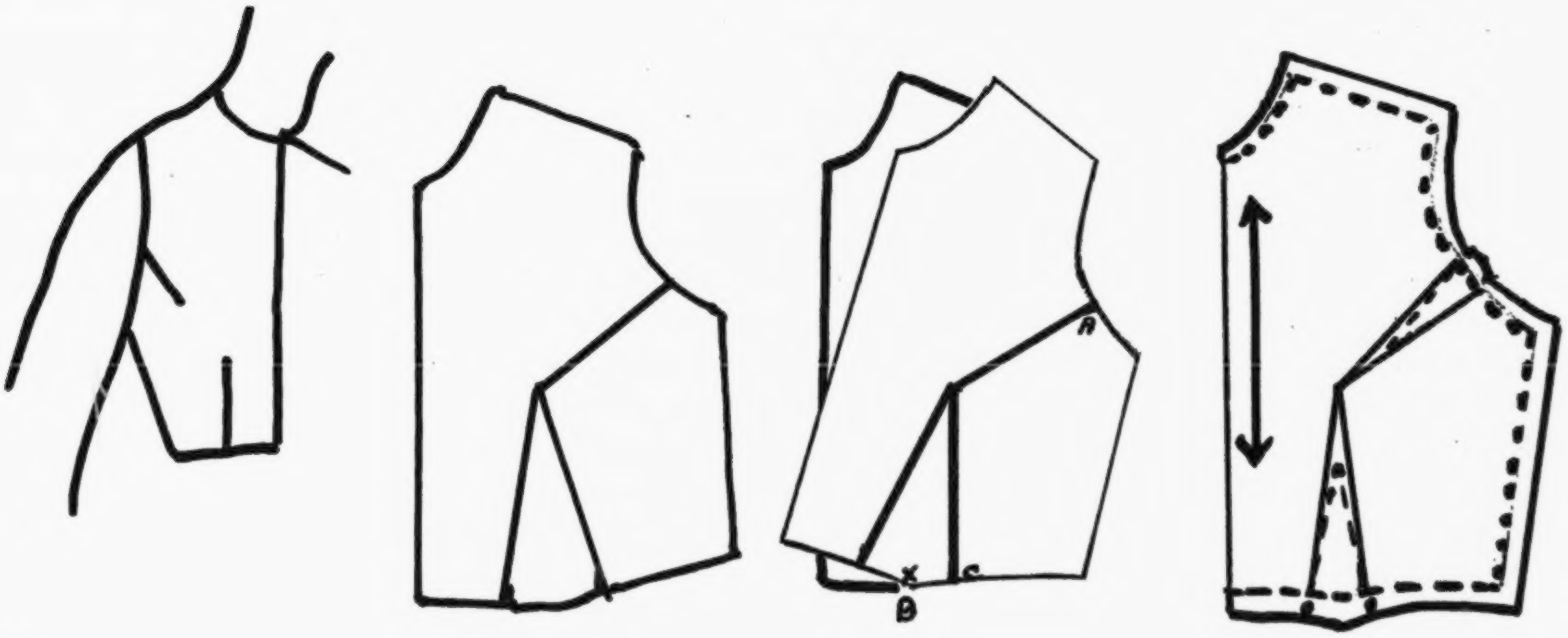


Fig. 98

D. Division of Darts

Dividing the Waistline Dart — Lesson 7

OBJECTIVES: To become familiar with two methods of dividing a single dart into two or more darts - by slashing-and-spreading and by drafting.
To become familiar with the difference between darts and dart-tucks.
To learn how to divide the waistline dart.

RELATED INFORMATION:

It is possible that one dart in a single location may appear bulky or uninteresting. To create interesting design or to give the garment a more flattering line, a single dart can be divided into two or more separate darts. This proves particularly satisfactory for individuals having large bust development.

For a slender design, the waist dart, stitched clear to the point is youthful. A dart that is stitched only part way is a dart-tuck and provides more drape and softness than a completed dart. The dart-tuck is flattering to the women's full or half-size figure.

The spacing between such waistline darts can do much to create illusion in form. If they are placed parallel to the center-front and to each other, it will create the impression of a larger waistline. But if the first line is made parallel to the center-front and the next two are tipped outward slightly at the top, the effect of a tapering waistline will result.

In this lesson we will cover two methods of changing the single dart at the waistline into two or more darts. In the "drafting" method, it is necessary to measure small distances to determine the width of a dart. All such measurements should be made at right angles to the center-line of the dart.

PROCEDURE:

Example A. Division of waistline dart into three dart-tucks by slashing and spreading.

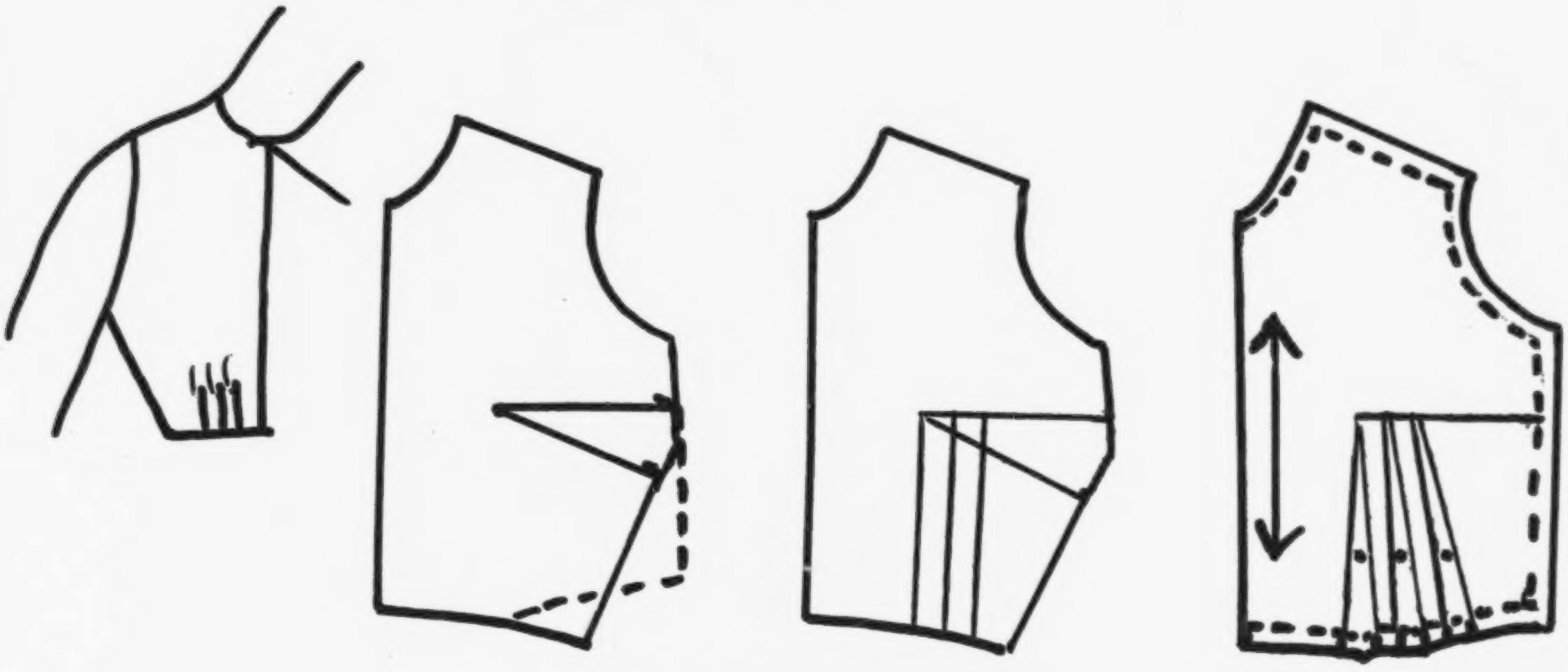


Fig. 99

1. Using the basic sloper with the waist dart, swing dart to underarm position.
2. Mark the desired position of the three waistline darts by drawing lines from underarm dart to the waistline.
3. Slash underarm dart.
4. Slash guide lines for the three darts from waist to underarm dart.
5. Close underarm dart. Spread guide lines so that there are three equal openings at the waist. Pin or tape in place.
6. Mark dart positions by notches at the waistline.
7. Shorten darts to $1\frac{1}{2}$ inches from waistline. These will be dart tucks. Make perforations at center and one side of each dart at the $1\frac{1}{2}$-inch mark. (Fig. 100.)
8. Fold the dart-tucks toward the center and trace the seamline.
9. Add seam allowance.
10. Complete pattern--grain, notches, etc.

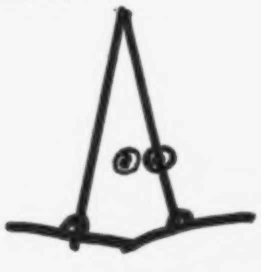


Fig. 100

Example B. Dividing the waistline dart into two darts by drafting.

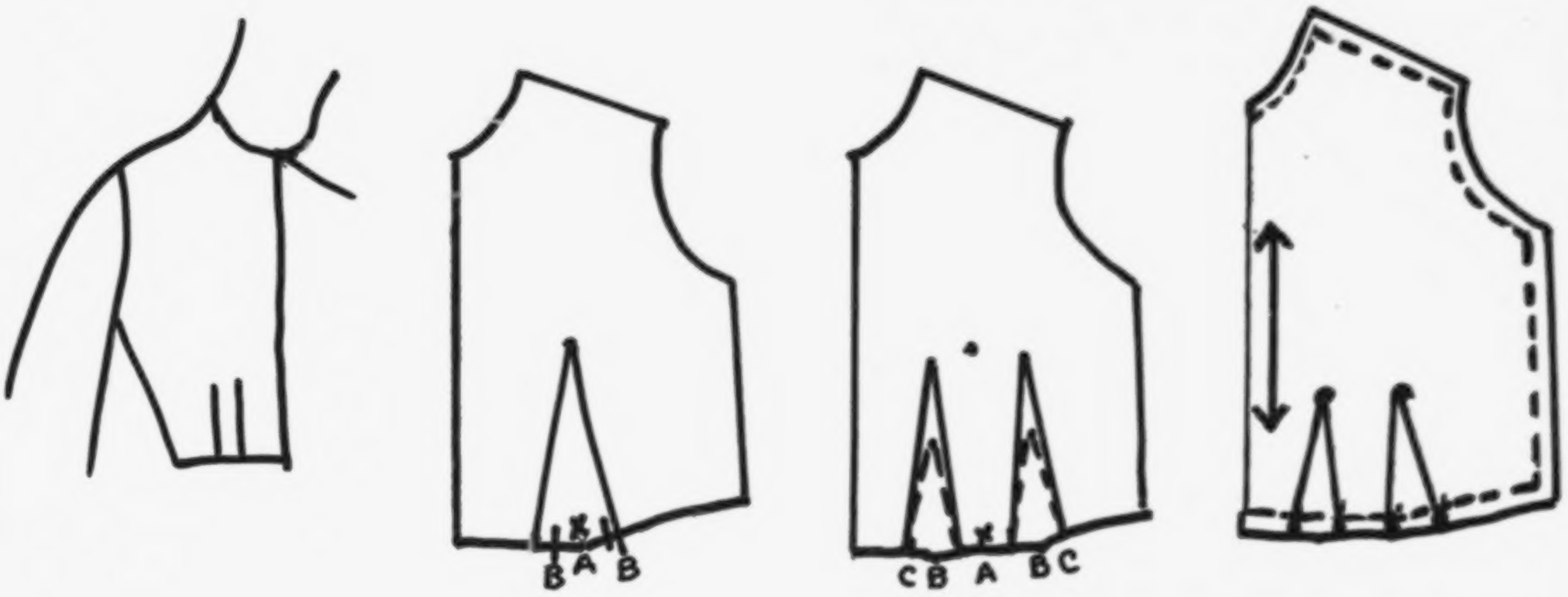


Fig. 101

1. Trace the sloper with the waist dart on pattern paper.
2. Determine how far apart the two darts are to be at the waistline. (Two inches will be used here, but styling should be determined by the individual figure.)
3. Mark off the center of the waist dart (A).
4. Mark off one inch on either side of the center mark (B).
5. Measure the width of the single dart. Divide this measurement in half. This will be the new measurement for each dart.
6. Mark off the two darts on either side of positions (B), using the measurement for a single dart (C).
7. The distance between the points of the darts should be a little greater than that between the dart centers at the waistline.
8. Shorten darts.
9. Fold the darts toward the center and trace the seamline, using the tracing wheel.
10. Add seam allowance.
11. Be sure to mark grain line, notches, etc.

ASSIGNMENT:

1. Duplicate both of the above patterns.

2. Use method (A) to obtain two darts at the waistline.

3. Use method (B) to obtain three dart-tucks at the waistline.

4. Collect six sketches of dresses that use multiple darts.

UNIT III - WAISTS

D. Division of Darts
Dividing the Shoulder Dart — Lesson 8

OBJECTIVES: To review "swinging the dart" from waist to underarm position.
To learn how to divide the should dart into two darts.
To learn how to develop a pattern with three dart-tucks at the shoulder.

RELATED INFORMATION:

Multiple darts can be developed in a pattern in a number of ways--using waistline darts, underarm darts, and shoulder darts. No matter what dart is used, the principle of "swinging the dart" must be clearly understood.

Darts at the shoulder may be stitched to a point as regular darts or may be shortened as dart-tucks. This depends upon the style, size, and the fabric. The dart-tuck is used to give released fullness and is often used for the figure with narrow shoulders but full bust. The dart-tuck is never stitched to a point but will taper as a dart as far as the stitching goes.

PROCEDURE:

A. The development of three darts at the shoulder through the use of the underarm dart. (Method - slashing and spreading.)

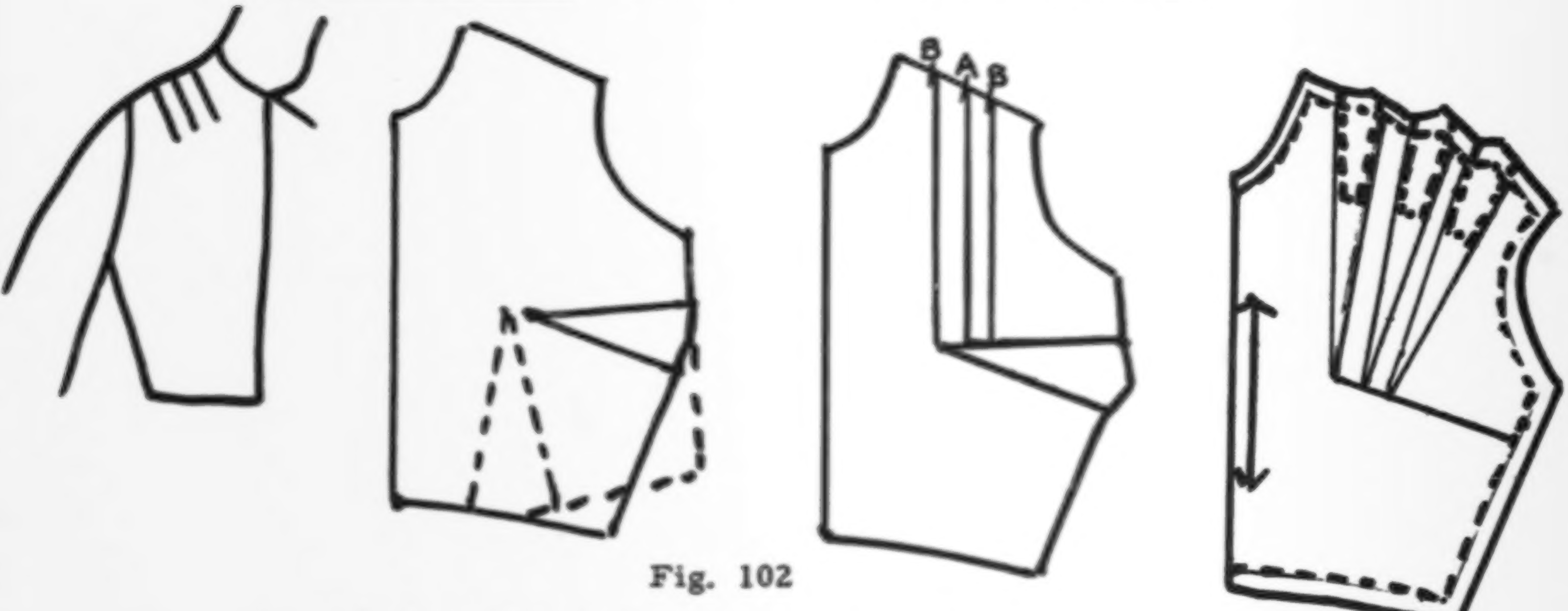


Fig. 102

1. Using the basic sloper, with the waist dart, swing dart to underarm position.
2. Determine position for darts at the shoulder. Mark center dart (A).

3. Mark position for other darts--one inch on each side of center (B).
4. Draw guide lines from these shoulder positions to top edge of the underarm dart.
5. Slash underarm dart.
6. Slash guide lines from shoulder to underarm dart.
7. Close underarm dart.
8. Spread guide lines for shoulder darts so that they are equal. Pin or tape in place.
9. Mark dart positions. The dart-tuck may be any length you wish. For these darts measure down four inches from shoulder and mark.
10. Make perforations for centers of darts and one side of darts as a guide in stitching the dart-tucks. Perforations should be $\frac{1}{8}$ inch from finished edge.
11. Fold darts toward center and trace seamline with the tracing wheel.
12. Add seam allowance around complete pattern, mark grain lines, and be sure to mark all notches.

B. Dividing the shoulder dart into two darts (Method - drafting)

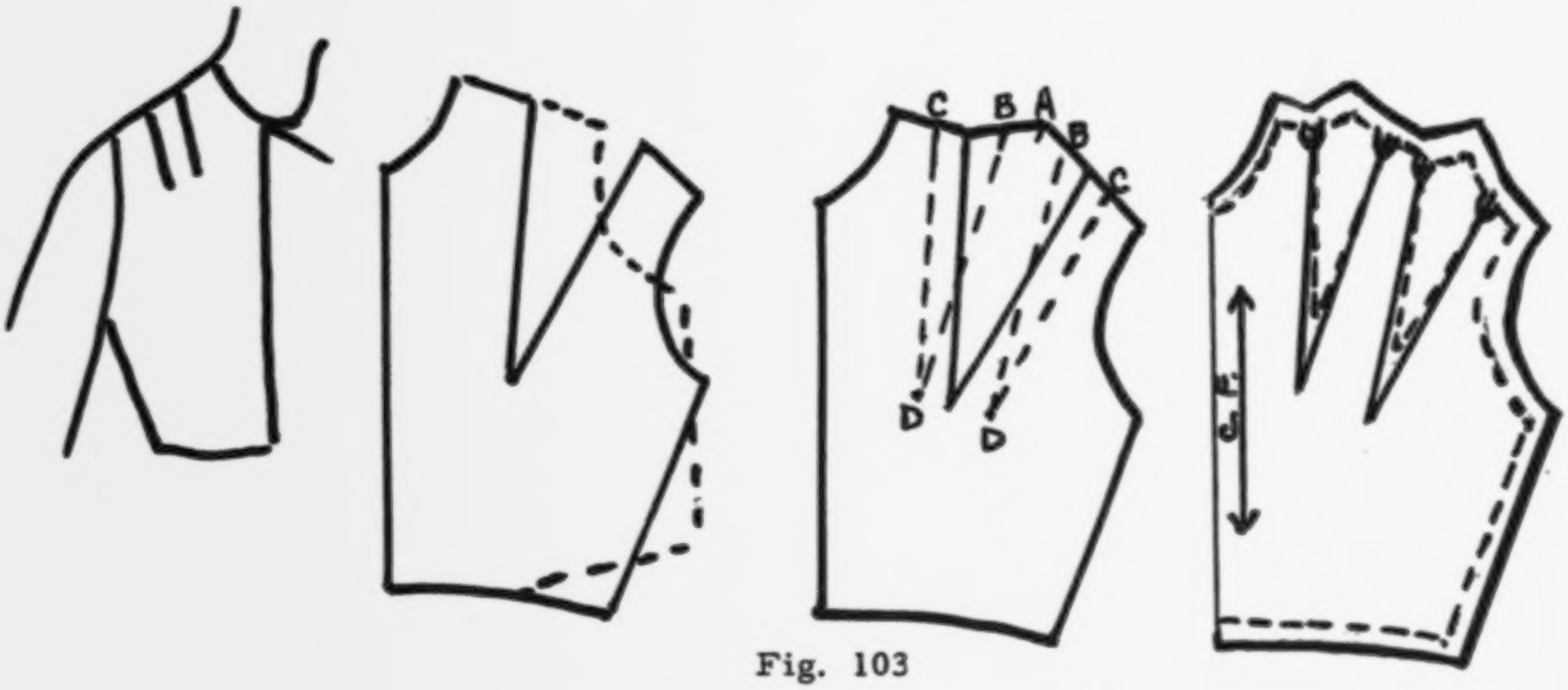


Fig. 103

1. Pivot basic sloper so that the dart control is at the shoulder.
2. Mark center of shoulder dart (A).
3. Measure $1\frac{1}{4}$ inches on each side of the center mark and label these positions (B).
4. Divide the original dart amount in half and mark on outside of dart legs (position C).
5. Measure $1\frac{1}{4}$ inches to each side of the dark point. Mark these points (D).
6. Draw in the new darts, connecting (B) and (C) to (D).

7. Fold the darts toward center and trace seamline with the tracing wheel.
8. Add seam allowance, mark grain lines, and be sure to mark all notches.
9. Shorten darts $1\frac{3}{4}$ inches.

ASSIGNMENT:

1. Duplicate both of the above patterns.

2. Turn in practice sheets for "swinging the dart" (a) from waist to underarm; (b) from waist to armhole; (c) from waist to neck.

UNIT III - WAISTS

D. Division of Darts
Dividing the French Dart — Lesson 9

OBJECTIVE: To learn how to divide the French dart into two or more darts.

RELATED INFORMATION:

In the division of darts, there are several questions to be answered for good design. Which dart or darts are more flattering to the individual figure? Which dart or darts utilize the patterned or textured surface of the material to the best advantage? Is there too much dart control needed for just one or two darts? In this lesson you will convert the single French dart into two or more darts. In designing, the French dart is most flattering in giving the illusion of a high, youthful figure.

PROCEDURE:

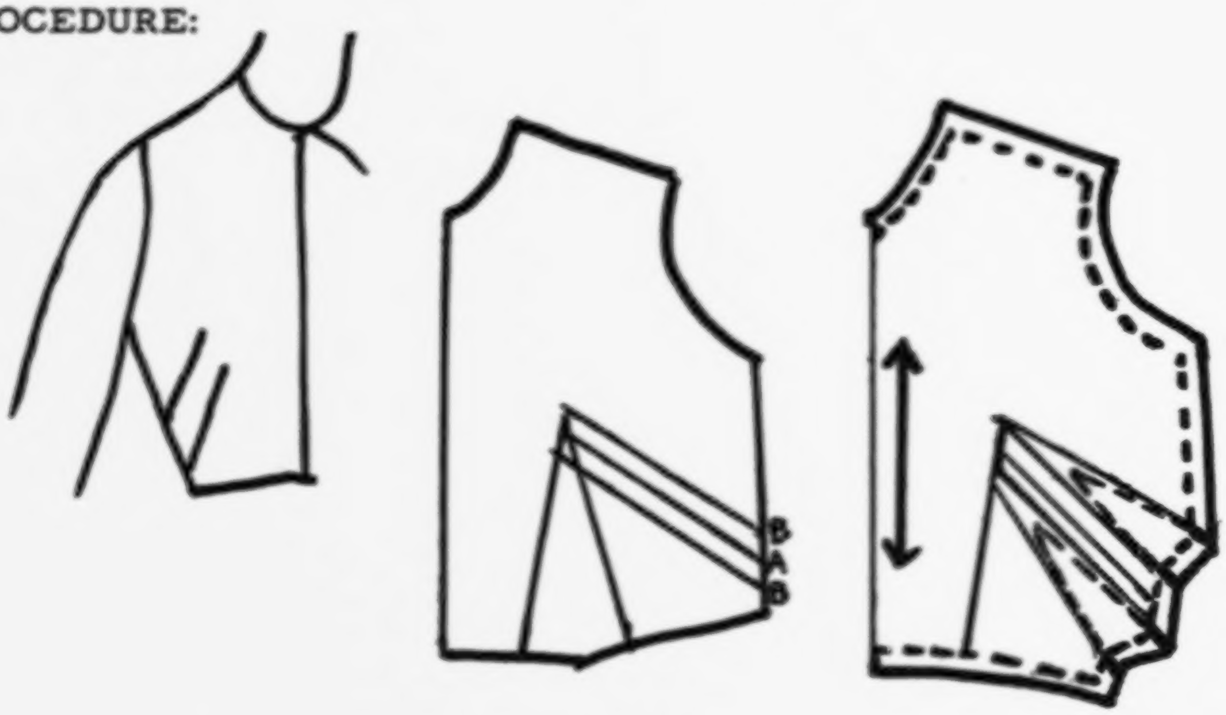


Fig. 104

1. Trace the basic sloper with the waist dart.
2. Draw the line for the French underarm dart (A).
3. Draw a line on each side of (A), parallel and one-half inch away (B).
4. These two lines (B) should end about one inch below the bust point. The darts will be shortened to these points.
5. Slash the waistline dart and then slash the guidelines (B's) for the two French darts.
6. Close the waistline dart by swinging the section with the guidelines for the two darts into the new dart opening, with the point touching the bust point.

7. Shorten each dart according to the style wanted.
8. Fold the darts toward the waistline and trace the side seam.
9. Complete the pattern as in previous lessons.

ASSIGNMENT:

1. Duplicate the above pattern.

2. Using the center-front dart, develop a pattern with three darts at the center-front, from bust point to waistline.

3. Collect six pictures of bodices that have fullness without the use of darts.

UNIT III - WAISTS

E. Dart Control in the Back Bodice Lesson 10

OBJECTIVE: To learn the necessary rules regarding the changing of the dart control in the back bodice.

RELATED INFORMATION:

The bodice-back sloper has a high, round neckline, an armhole for a set-in sleeve, and a waistline dart that extends to the fleshy part of the lower shoulder blade. Although there is little change in dart control of the back bodice, the principles of "swinging the dart" and division of darts are the same as for the front bodice.

PROCEDURE:

Example A. Swinging the waistline dart to the shoulder

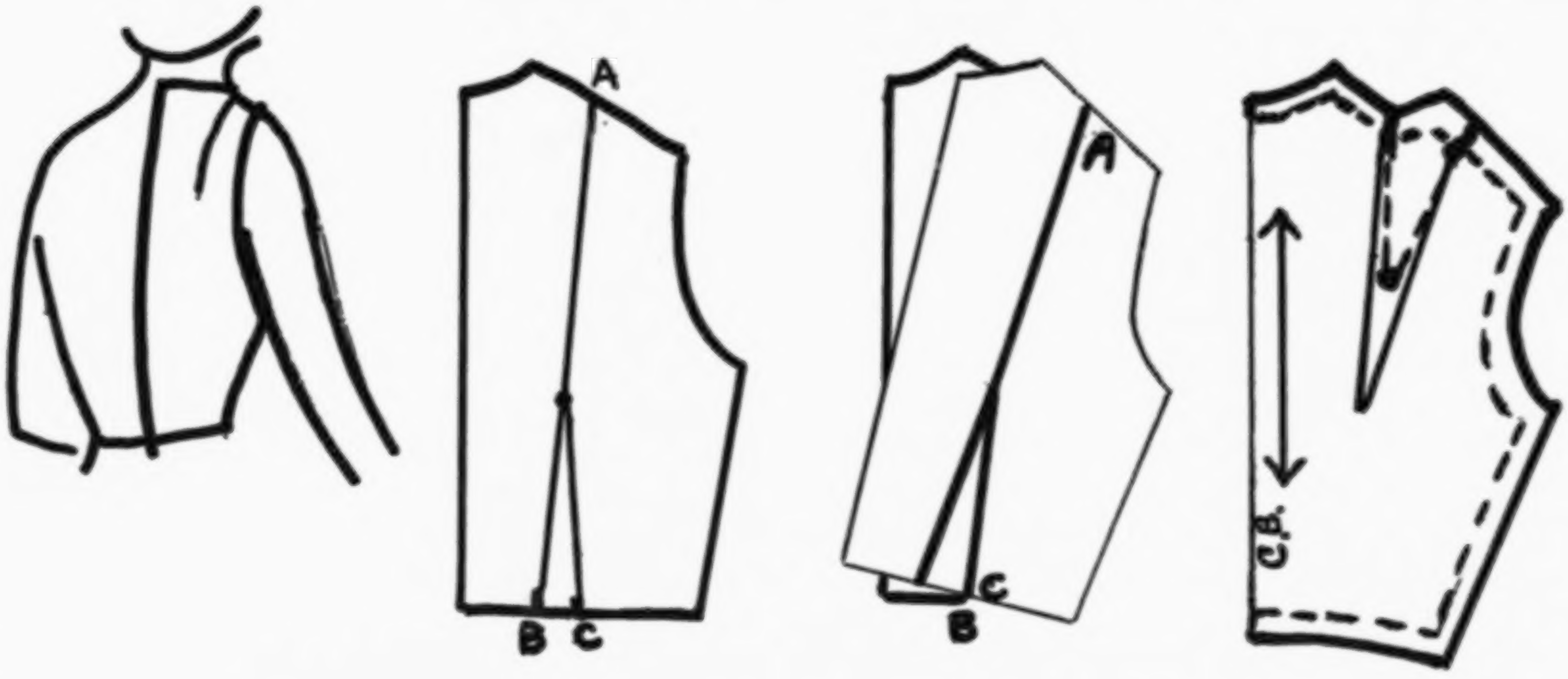


Fig. 105

1. Crossmark dart position at shoulder (A).
2. Trace sloper from (A) around shoulder, neck, center-back, and waistline as far as the inner leg of the waist dart (B).
3. Holding sloper at pivoting position, pivot sloper until waist dart is closed. (C will fall on B.)
4. Draw in remainder of shoulder, armhole, side, and waist.
5. Remove sloper and form shoulder dart by connecting shoulder positions to pivoting position.

6. This shoulder dart will be too long and will give the garment a poor fit. Shorten the dart 1½ inches from pivoting position. This will give additional ease at the shoulder blade.
7. Draw in the new dart.
8. Fold dart toward center and trace seamline.
9. Establish grainline and add seam allowance and notches.

Example B. Dividing the waist dart into two darts or dart-tucks

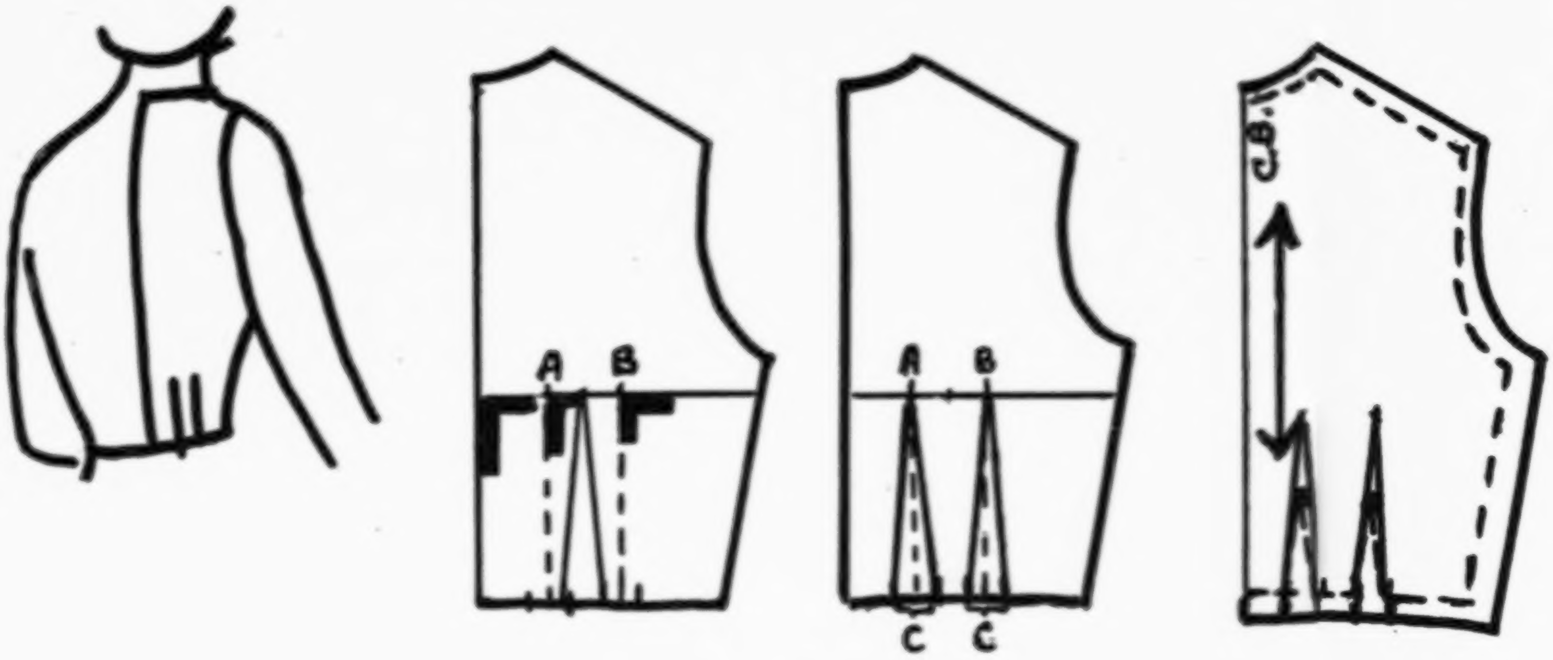


Fig. 106

Because of the gentle slope of the back, two shallow darts in the back will give a better fit than one deep dart.

1. Trace basic sloper with waist dart.
2. Mark position of single dart.
3. Using the square, draw a line across the back at dart point.
4. Crossmark a point 1½ inches on each side of the dart point (A) and (B).
5. Using the square, draw two parallel lines from points (A) and (B) to the waistline.
6. Measure the width of the original dart at the waist. Divide in half. This will give you the width of each of the two darts (C).
7. Mark off half of (C) on each side of the parallel lines.
8. Draw in the new darts.
9. Shorten darts one inch.
10. Fold darts toward center and trace new seam line.
11. Complete pattern.
    Note: If dart-tucks are preferred, indicate this by making perforations at positions you want the dart-tucks to be sewn. These released darts will give the back a bloused effect, which is flattering on most figures.

Example C. Dividing waist dart in half and swinging one-half to the shoulder

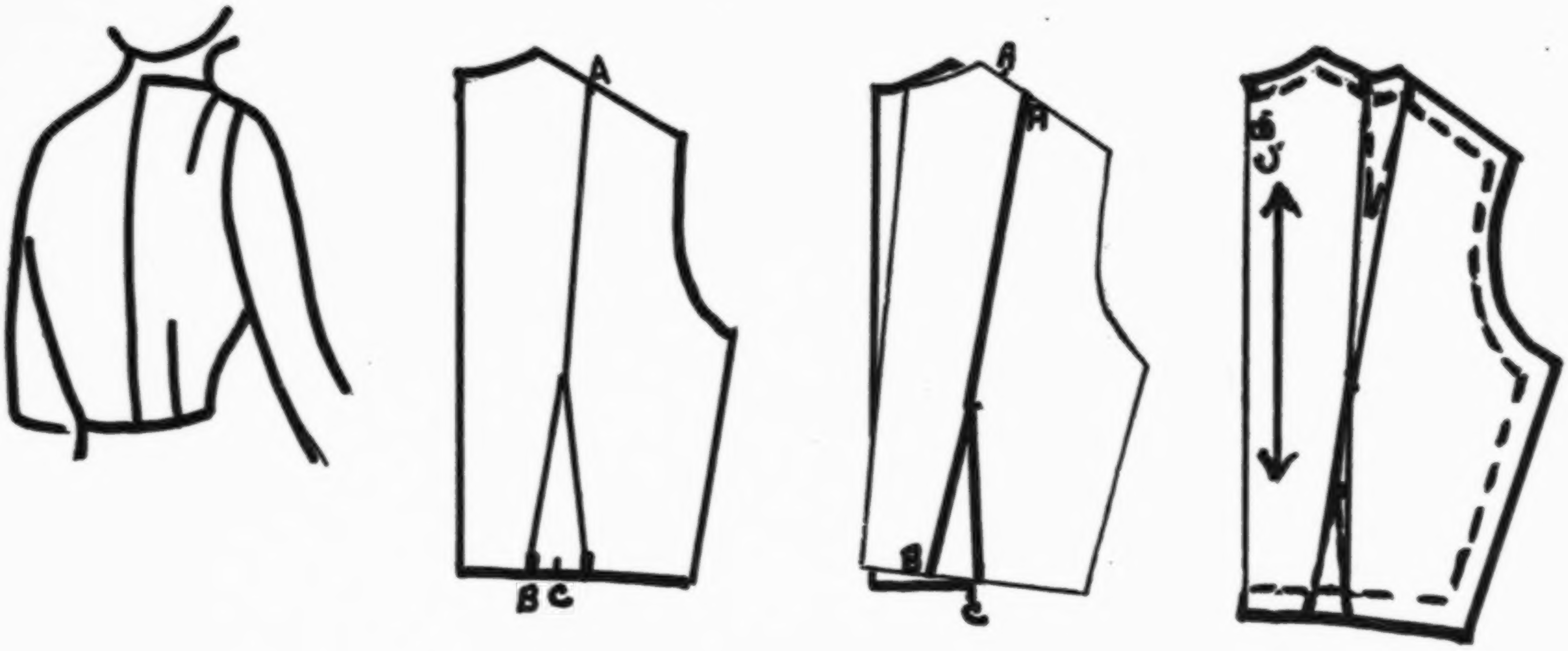


Fig. 107

1. Establish position of shoulder dart (A) midway between neck and armhole.
2. Mark the center of the waist dart on sloper (B).
3. Trace sloper around from (A) to (C).
4. Holding sloper at pivoting point, swing sloper so that the second waist notch overlaps the mark for the center of the waist dart, (C).
5. Be sure to mark the pivoting position.
6. This divides the waist dart so that half of the dart is now at the shoulder position.
7. Be sure to mark all four positions for the new darts.
8. Remove sloper. Form darts by connecting the new markings at waist (B and C) and shoulder (A and A) to pivoting point.
9. Shorten darts as previously instructed.
10. Fold the darts in the position they will be pressed--toward center.
11. Use tracing wheel for trueing darts. Draw seamline at waist and shoulder.
12. Complete pattern.

Example D. Shifting back waist dart to armhole seam

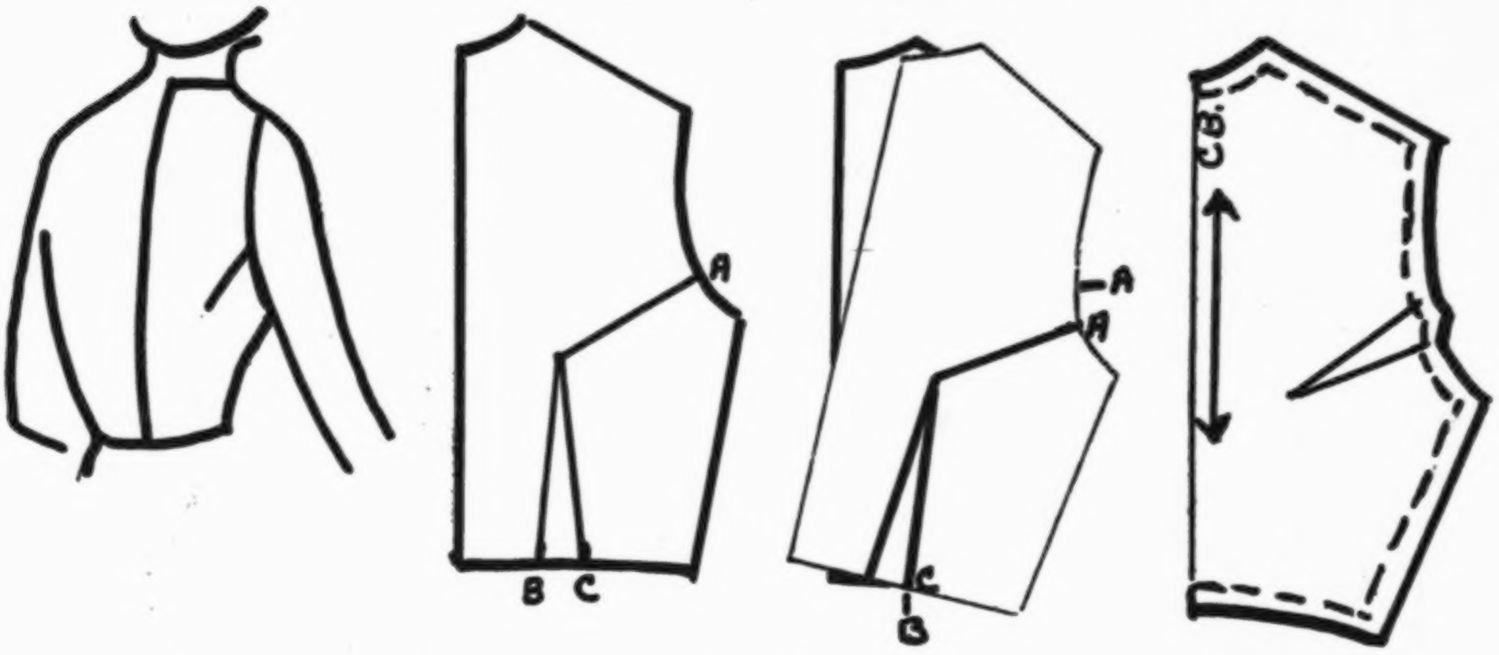


Fig. 108

Follow the general method that has been used for shifting darts.

Example E. Eliminating back dart

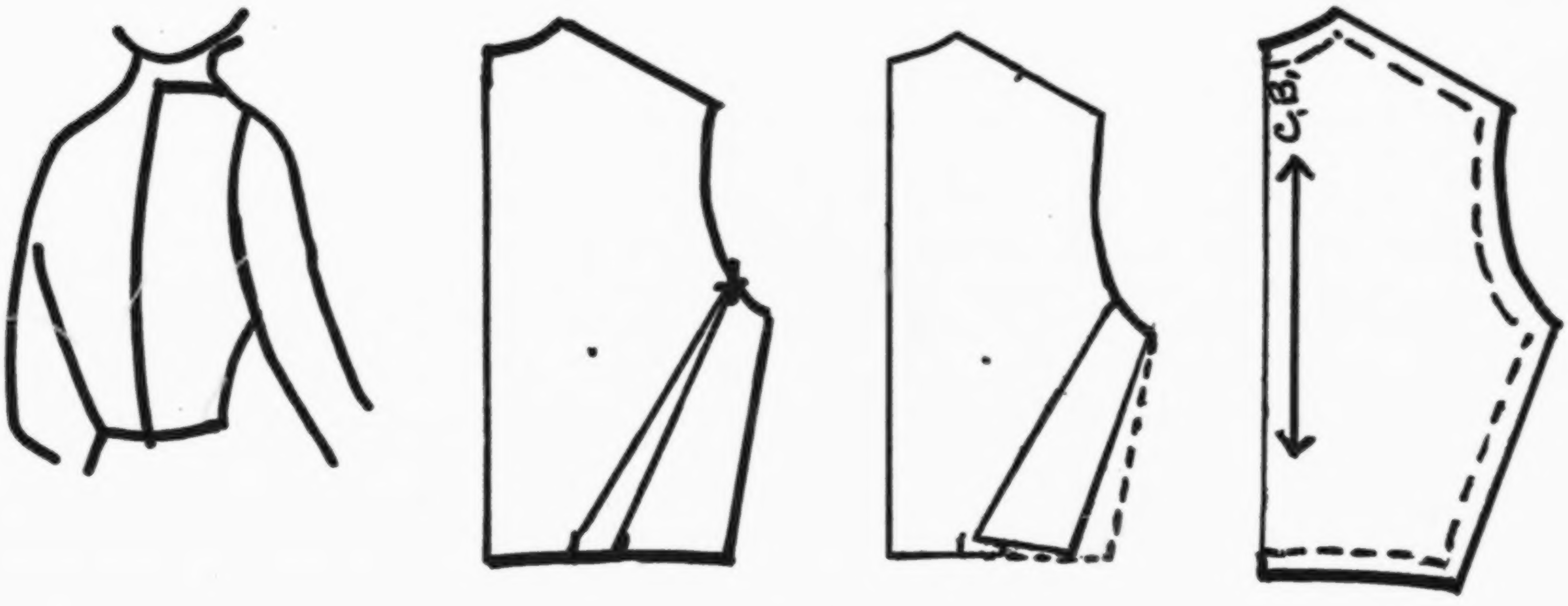


Fig. 109

Because the lower back is relatively flat, the back dart may be removed completely.

1. Trace the basic sloper on pattern paper.
2. Crossmark a position at the lower armhole one or two inches from underarm.
3. Connect the two leg endings of the waist dart at the waistline to the position marked at the armhole.

4. Close new dart from waist to armhole.
5. True waistline seam by connecting dart position to underarm seam. Note: This type of pattern can be used in sun-back or evening bodices.

Example F. Shifting shoulder dart to neckline

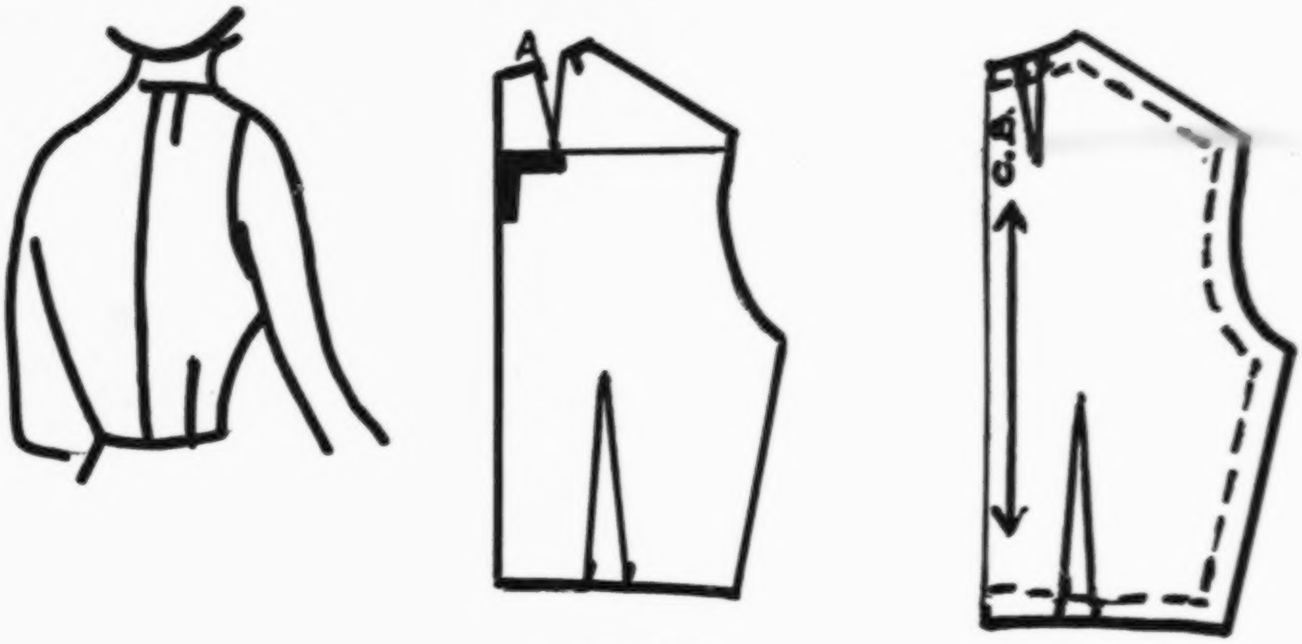


Fig. 110

To improve the fit of most garments, a dart at the neck may be used. To do this, the principle of swing-the-dart is used.

1. Using the basic back sloper and starting at the waist-dart leg closest to the center-back, trace around the center-back to a point 1½ inches into the neckline (A).
2. Holding pencil in pivoting point, swing the sloper one-half inch away from position (A).
3. Finish tracing the sloper.
4. To form the neckline dart, square a line 3 inches down from the neck on the center-back.
5. Measure in two inches on the line and crossmark. This will be the dart point.
6. Fold darts in the position they will be pressed--toward center.
7. Use tracing wheel for trueing darts.
8. Complete pattern.

ASSIGNMENT:

Develop all six patterns covered in this lesson.

F. Creating the Princess Line

Basic Princess Bodice — Lesson 11

OBJECTIVES: To learn how to develop the princess bodice.
To learn how to use a seam as a substitute for dart control.

RELATED INFORMATION:

In many designs we shall find no visible darts or gathers, and yet we know the dart control must be there. In these designs the dart control is concealed in a seam which can be used as a decorative feature of the design. Where a seam is used as a substitute for the control dart, it generally falls across the high point of the body. Through the use of dart manipulation, darts can be eliminated and replaced with seams, such as used in the princess bodice.

The princess seam formed by combining the vertical waistline dart with a shoulder dart is often called the French dart-seam. The standard line slants from mid-shoulder over the bust, and continues slanting toward the center-front, where it enters the waistline. The French-dart bodice pattern may be used as the first step in developing patterns for a French bodice or basque, a French-dart jacket, and a princess-line dress.

Example A. Using waist and shoulder darts to develop the princess bodice

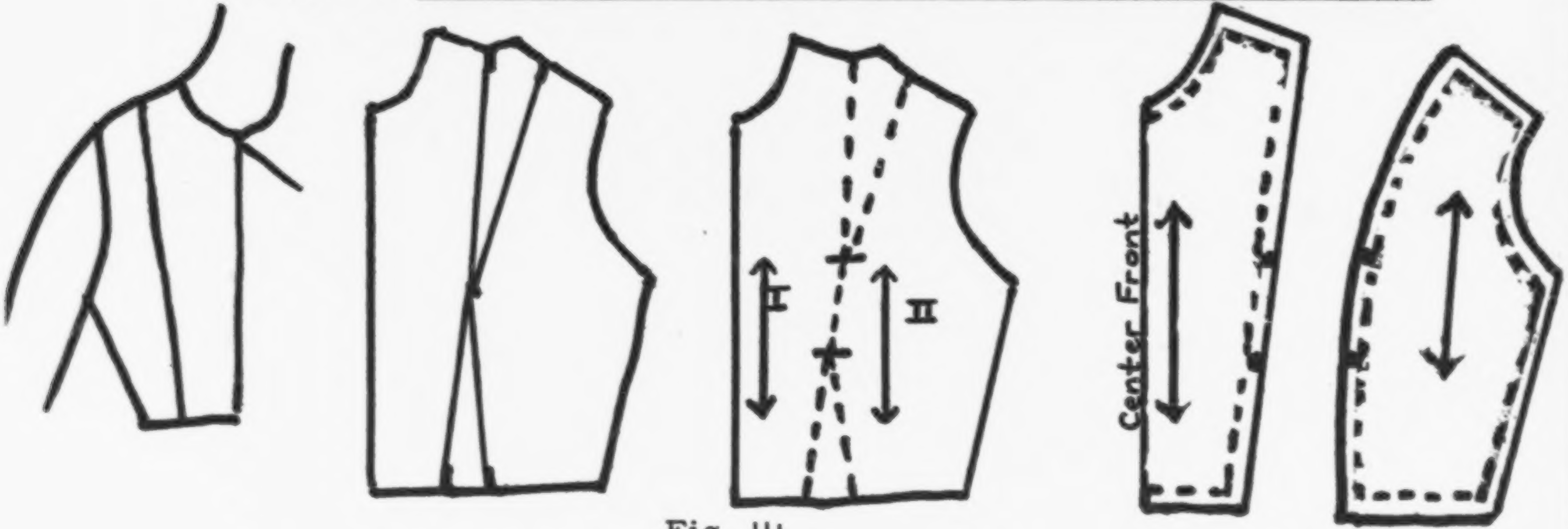


Fig. 111

1. Using the basic sloper with waist dart, swing sloper so half of the dart control is at the shoulder.
2. Shorten both darts $1\frac{1}{2}$ inches.
3. Connect both new dart points with a straight line.

4. Label center section (I); side section (II).
5. It is important to locate grain line before tracing pattern sections. To do this, draw a line on section (II) parallel to center-front.
6. Make crossmarks at the points of the darts. These crossmarks are needed to maintain the ease and shape at this position.
7. Trace sections (I) and (II) separately.
8. Correct the angular line in section (II) with a smooth curve. Use the French curve for this.
9. Add seam allowance, grain lines, notches, etc.

Example B. Using waist and underarm dart to develop the princess-line bodice

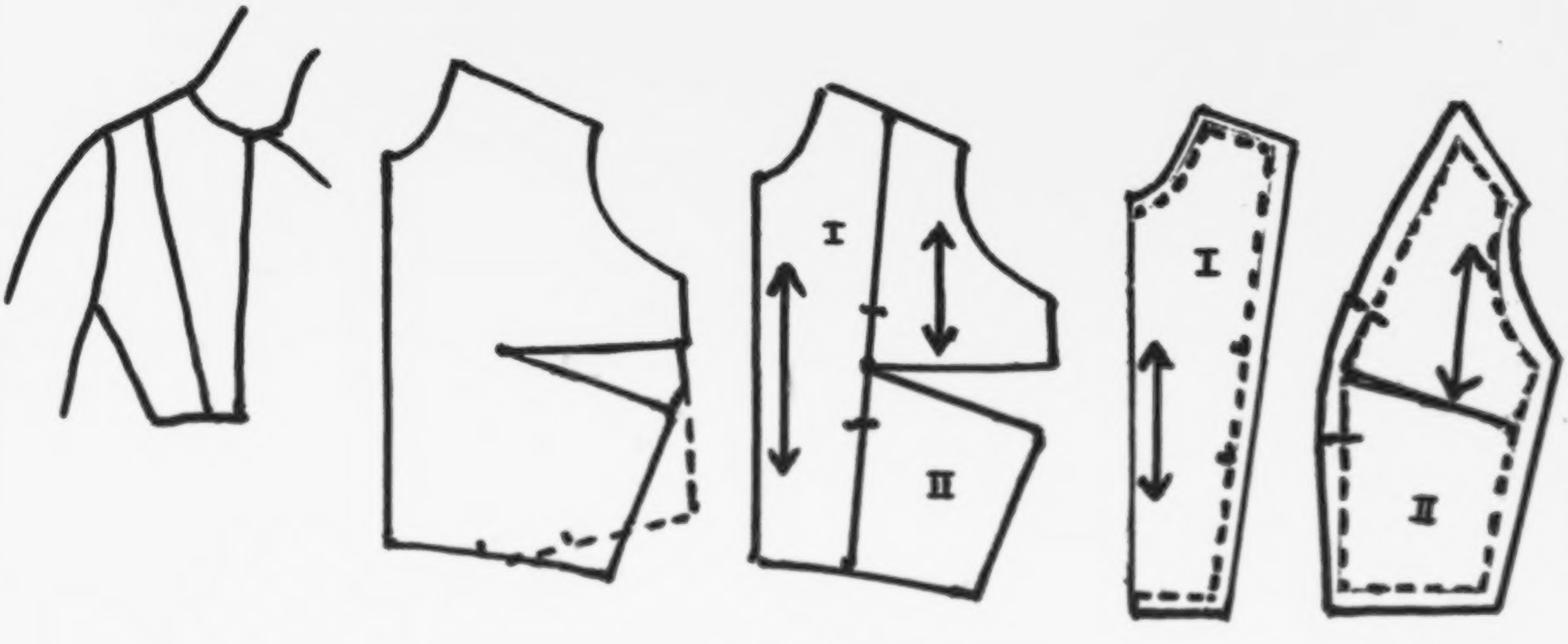


Fig. 112

1. Swing sloper at waist dart to form underarm dart.
2. Mark position of waist dart.
3. Draw a line from center of the shoulder to the position of the waist dart.
4. Mark the pivoting point.
5. Label sections: (I)-center front section, (II)-side section.
6. Place a notch $1\frac{3}{4}$ inches above and below dart point on both sections.
7. Establish grainline on section (II) by drawing a line parallel to center front.
8. Trace sections (I) and (II) separately.
9. Complete center-front section pattern.
10. Slash dart to the point and close dart in section (II). (The extra opening shown on the diagram at the end of the dart is for ease over the bust.)

11. Correct the line in section (II) with a smooth curve.
12. Add seam allowance, mark notches, and label final pattern.

ASSIGNMENT:

1. Develop patterns using both methods for both versions of the princess-line bodice.

2. Collect six pictures or draw six sketches of other placements of seams for the princess-line bodice or variations of it.

F. Creating the Princess Line
Adaptations of the Princess Bodice

Lesson 12

OBJECTIVES: To become familiar with garments for which the princess bodice is the basis.
To learn to develop variations of the princess line.

RELATED INFORMATION:

The princess line is a graceful line, fits beautifully, and lends itself to endless variations. The pattern developed in the previous lesson makes use of the dart lines, which are straight. This line can also be developed through the use of curved lines or angular styling. There are many times when these variations produce more pleasing effects. In this lesson we shall develop one of the most popular adaptations of the princess line, using two methods.

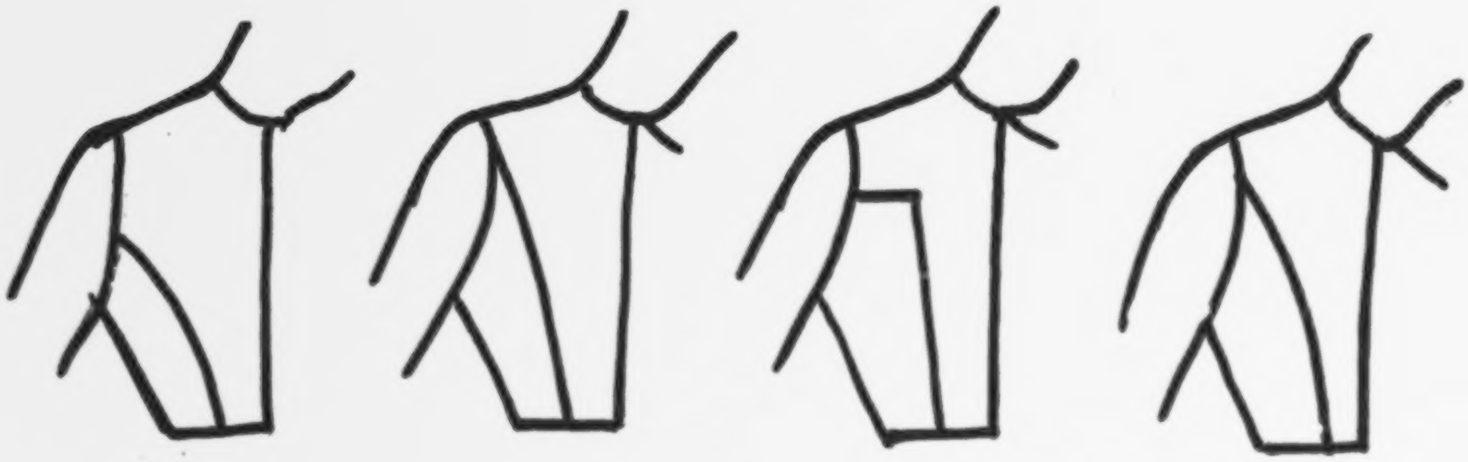


Fig. 113

PROCEDURE:

Example A. Using the basic sloper with the waist dart to develop an adaptation of the princess line

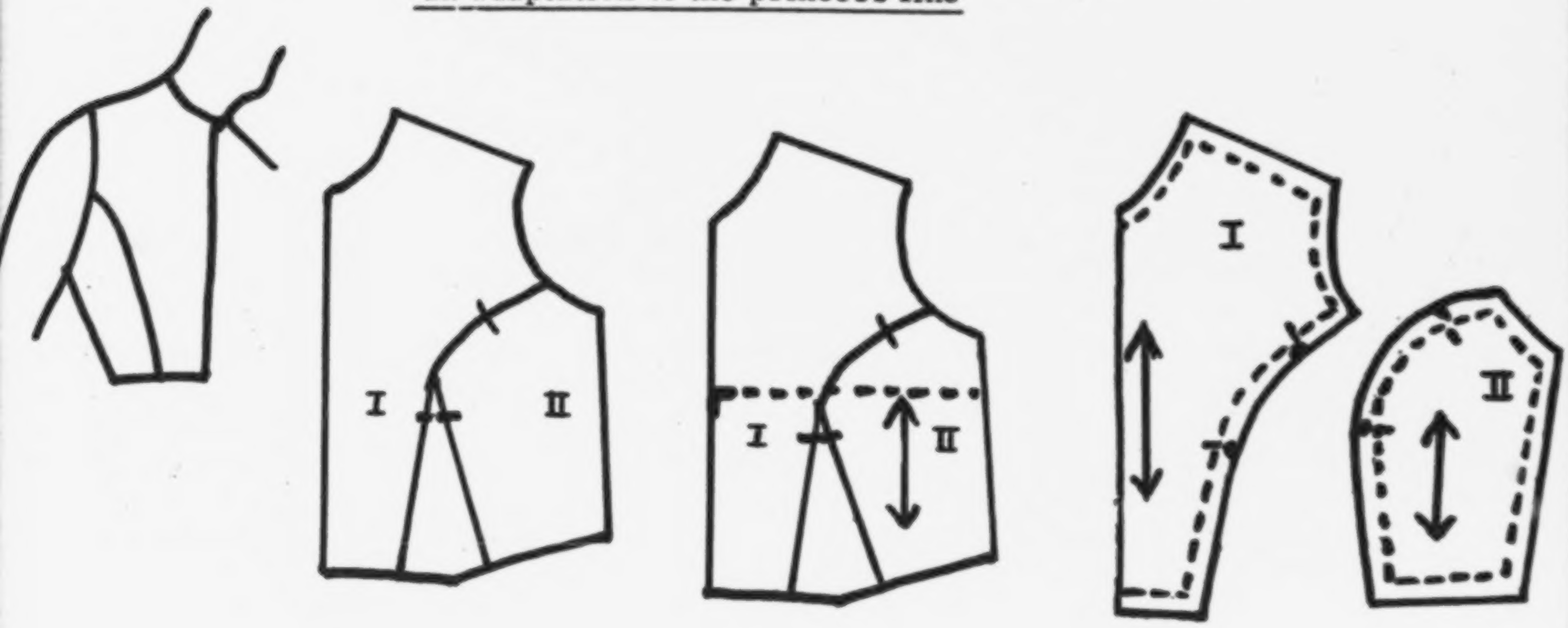


Fig. 114

1. Trace sloper with waist dart on pattern paper.
2. Draw in style line, starting above the underarm at armhole and following line of waist dart.
3. Label center section (I) and side section (II).
4. Crossmark $1\frac{1}{2}$ inches above and below the apex of the bust on sections (I) and (II).
5. Establish grain on section (II) parallel to section (I) by:
   a. squaring a line from center front across pivoting point of dart;
   b. then squaring a line from the horizontal line.

   (Note: When designing patterns which provide control through seams, it is advisable to plan that the straight grain in both sections will fall across the highest points of the curves of the figure.)
6. Trace section (I) and complete pattern--grain, seam allowance, and notches.
7. Trace section (II). Be sure to transfer crossmarks, which will be used as notches for matching to section (I).
8. Add seam allowance, grain line, and notches.

Example B. Developing an adaptation of the princess line by swinging half the waist dart to center-front bust position

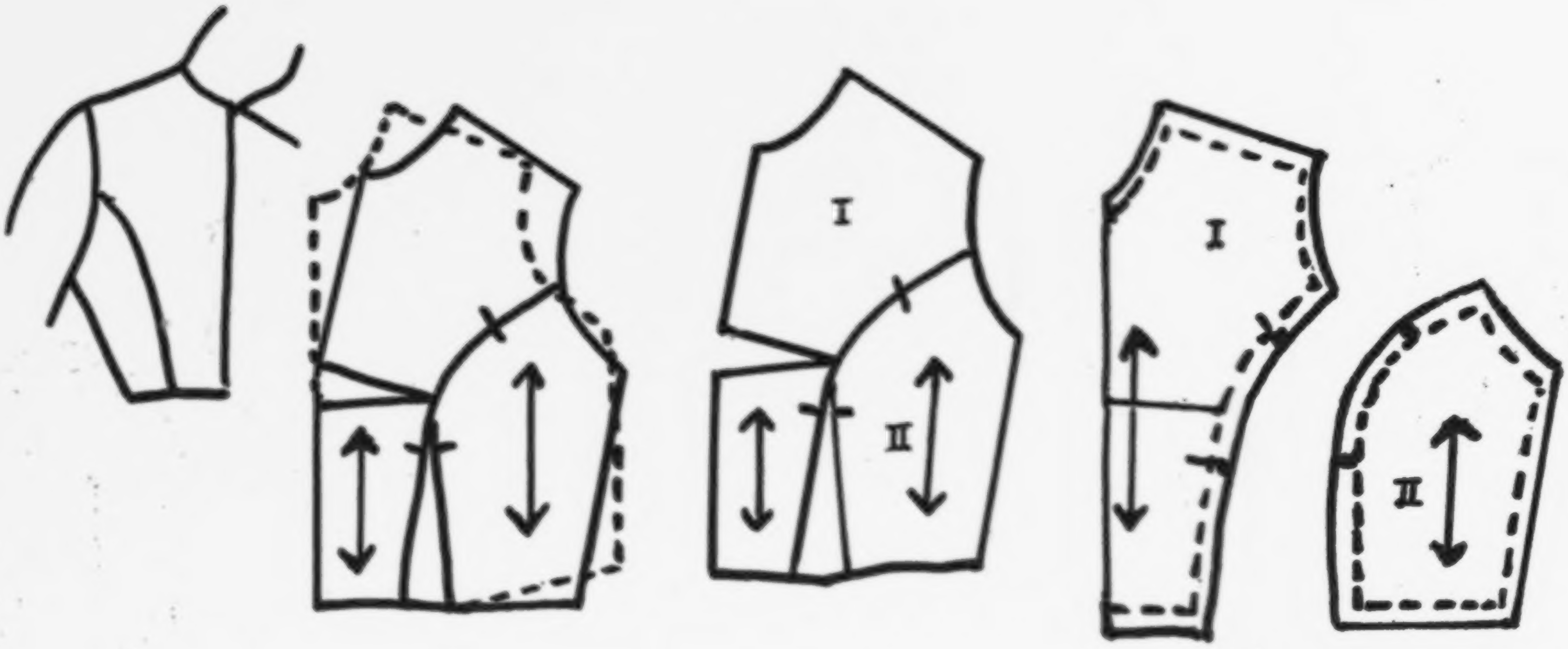


Fig. 115

1. Trace sloper with waist dart and swing one half of the dart to the center-front bust position.
2. Draw in style line, starting above the underarm at armhole and following line of waist dart.
3. Label center front section (I) and side section (II).
4. Crossmark $1\frac{1}{2}$ inches above and below the apex of the bust. Be sure crossmarks are placed on both sections.
5. Establish grain on section (II) by drawing a line parallel to center-front.
6. Trace pattern for section (II) and add seam allowance, notches, etc.
7. Close center-front dart of section (I) with pins or tape. Trace section (I). Add seam allowance, notches, etc.

ASSIGNMENT:

1. Develop patterns A and B.

2. What difference in effect, if any, would there be between bodices made from patterns A and B?

3. Bring in three sketches of princess-line adaptations and exchange with other students. Develop patterns for these adaptations.

UNIT III - WAISTS

F. Creating the Princess Line
Princess Line With French Dart — Lesson 13

OBJECTIVE: To learn to develop a princess-line pattern with part of the dart remaining at the seam.

RELATED INFORMATION:

Many times the dart control is divided between the princess-line seam and part of the underarm dart. The underarm dart helps the seam fit better, allowing more ease over the point of the bust. At the same time the princess-line seam flatters the figure. The vertical line adds length to the figure and the wide-shoulder effect balances the width of hips and at the same time narrows the waist.

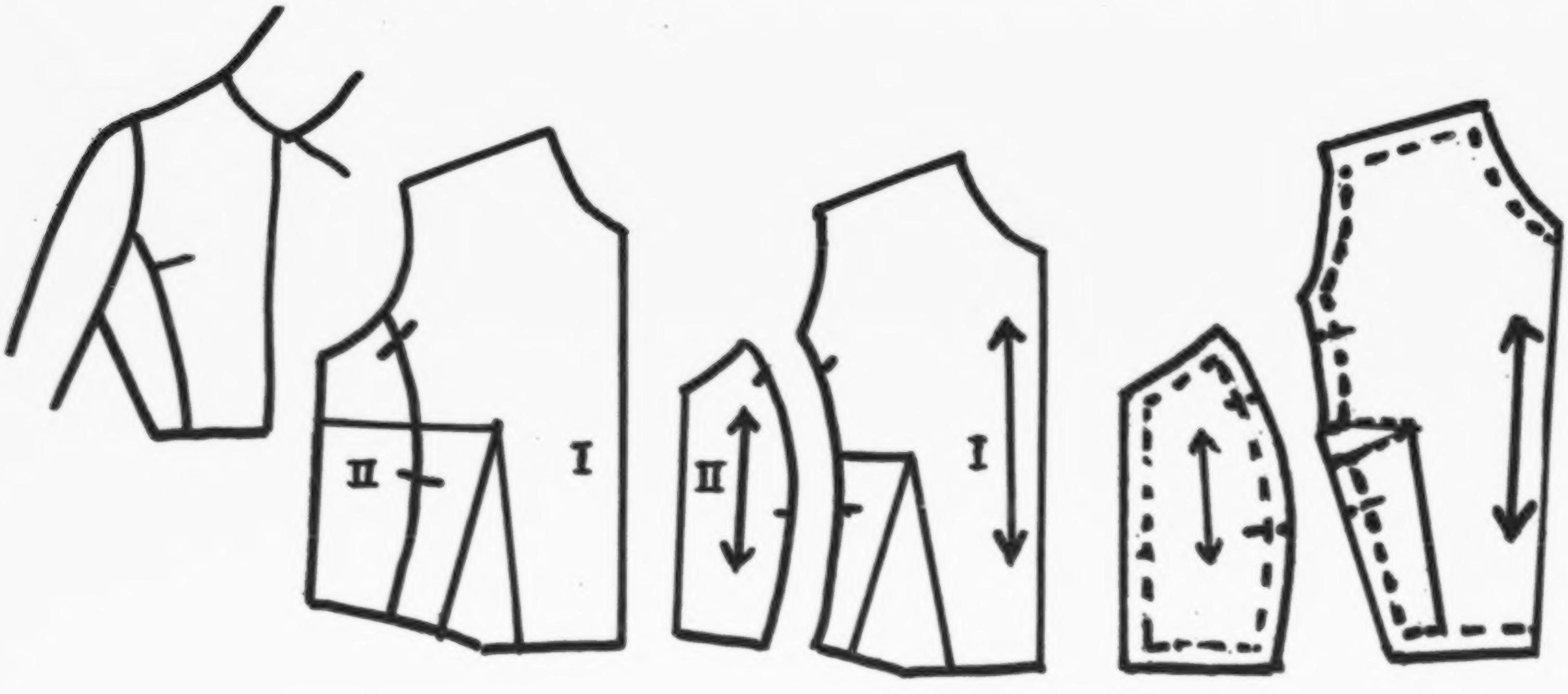


Fig. 116

1. Trace the basic front sloper with the waistline dart.
2. Draw the style line from armhole to waistline.
3. Draw a guideline for slashing from pivoting point to the style line. Crossmark for seam joining $1\frac{1}{2}$ inches above and below slash line.
4. Locate grain on section (II) by drawing a line parallel to the center-front.
5. Trace section (II) and complete pattern with seam allowance, notches, etc.

6. Trace center-front section.
7. Cut out dart and cut on slash line.
8. Pin center-front section on pattern paper.
9. Close waist dart--pin or scotch-tape.
10. Opening at seam will form the dart at the seam.
11. Complete center-front section pattern by adding seam allowance. Be sure to mark all notches and darts.

ASSIGNMENT:

1. Develop the above pattern.

2. Develop a pattern using the slash line in the direction of the French dart.

3. Bring in three pictures of garments using the dart at the princess-line seam.

G. Styling Waists With Fullness

Kinds of Fullness

Lesson 14

OBJECTIVE: To become familiar with the three different kinds of fullness.

RELATED INFORMATION:

Gathers, shirring, smocking, or drapery may be used instead of a basic dart, providing the fabric is pliable enough to give good results.

There are three types of fullness that can be added to a basic sloper: (a) straight, (b) semi-circular, (c) circular.

For straight fullness, the measurement added to the pattern is the same at the top and the bottom.

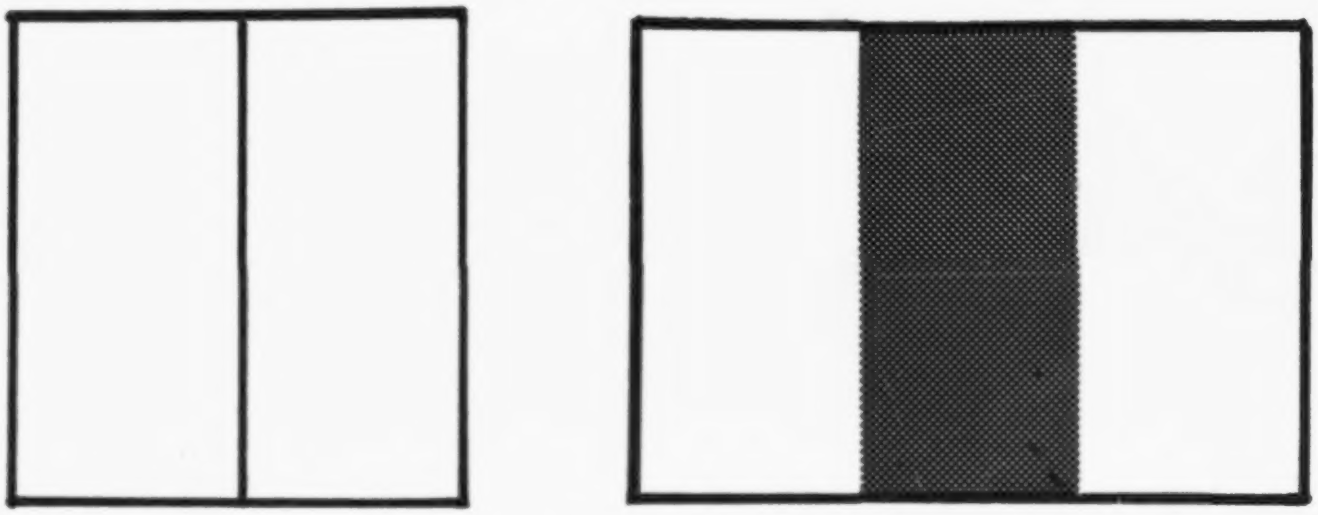


Fig. 117

In semi-circular fullness, the amount added is more on one side than the other. Additional fullness may be added to one side of a section of a pattern without affecting the dimension of the opposite side. Only the shape will be altered.

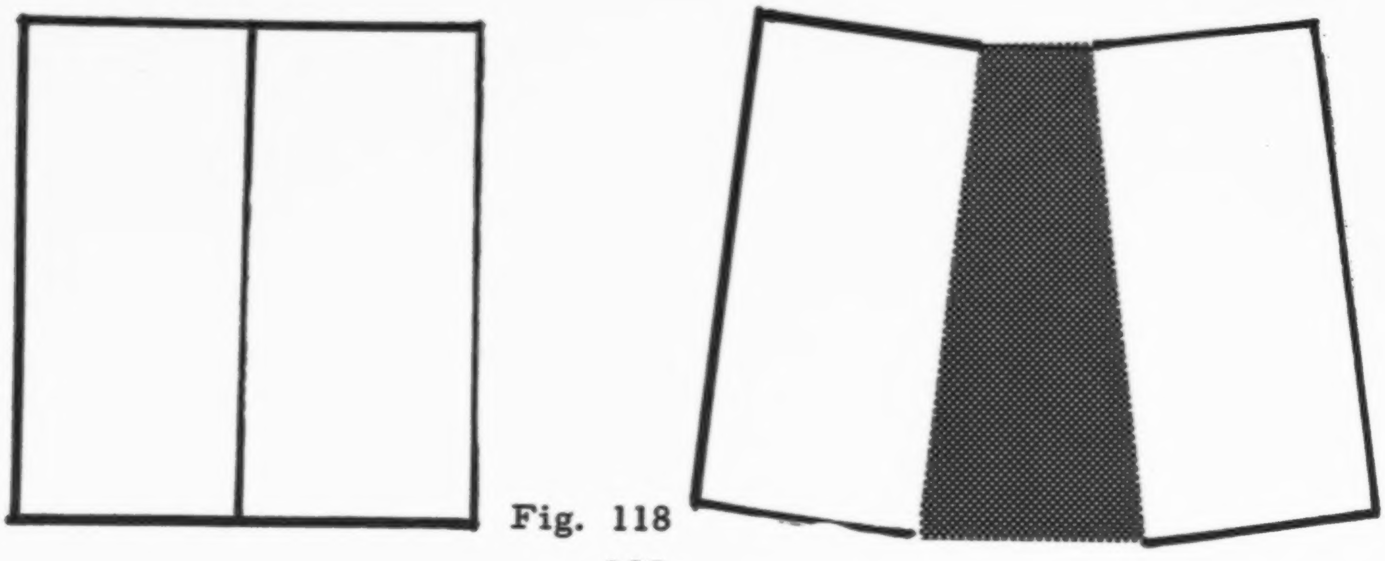


Fig. 118

In circular fullness, there is no change on one side, but fullness is added to the other side.

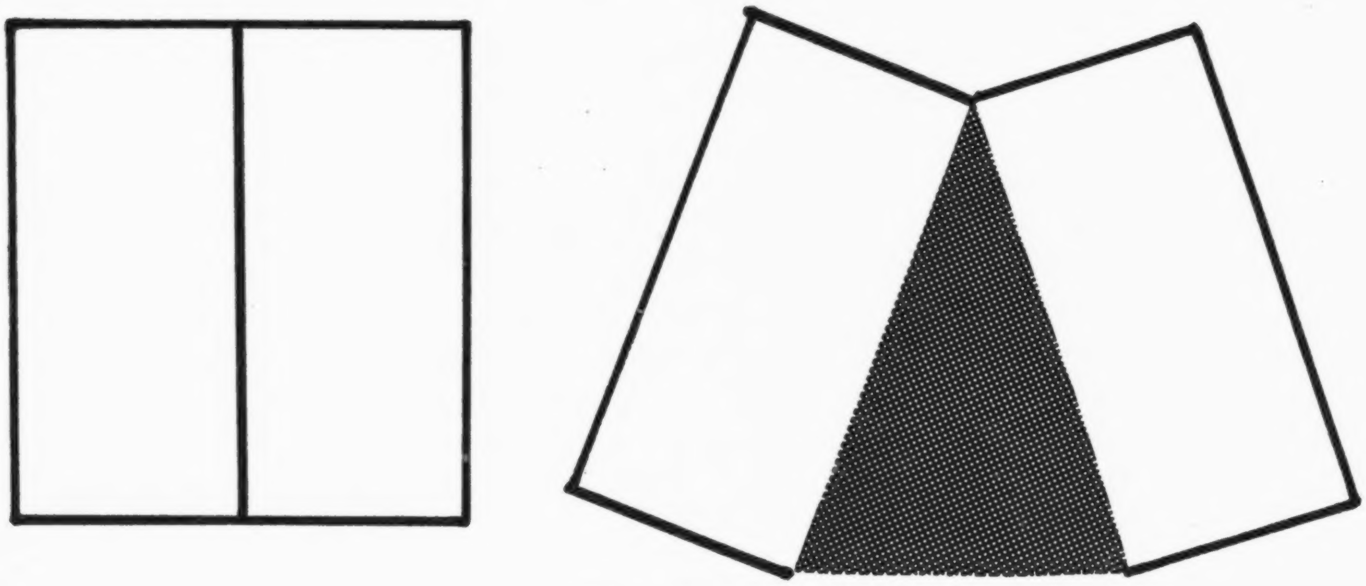


Fig. 119

To insure good fit, fullness that has been added to any area must be arranged and distributed in the final garment in exactly the same position as that used in the pattern.

PROCEDURE:

Example A. Straight fullness

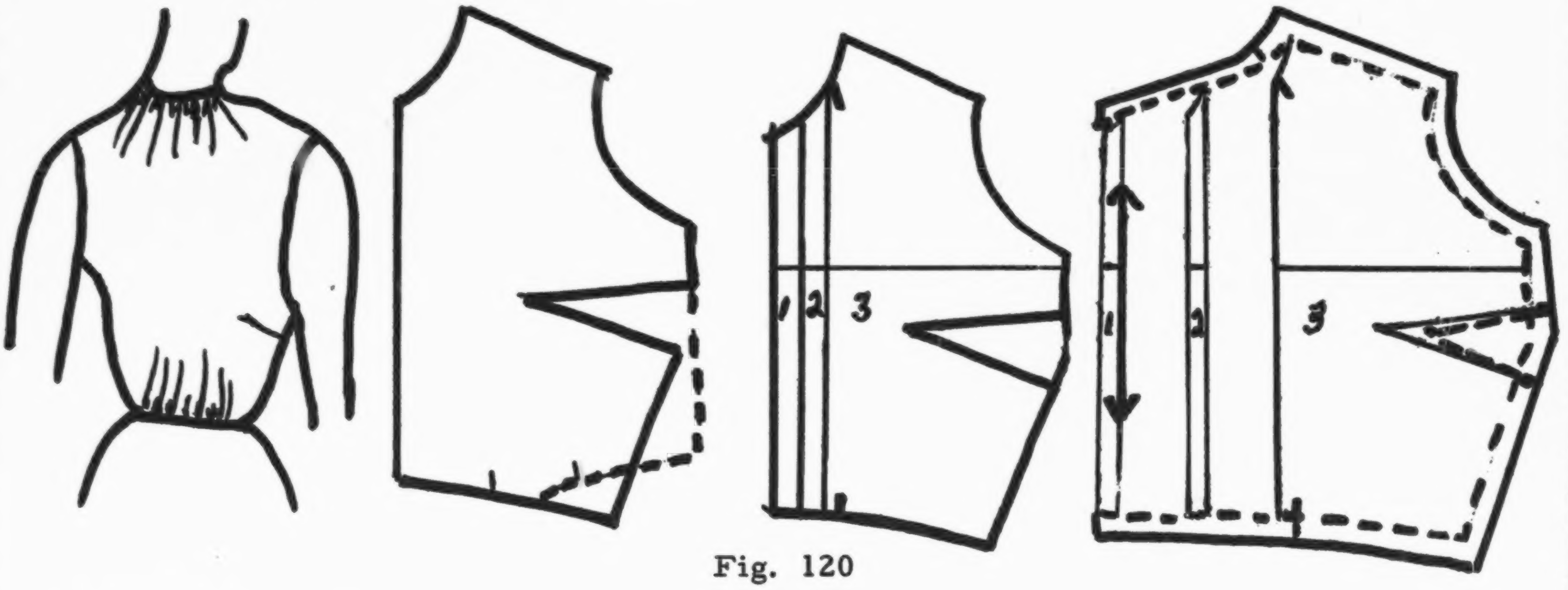


Fig. 120

1. Using the front sloper, swing waist dart to underarm.
2. Square a line from center-front to form a horizontal grain line.
3. Draw a few vertical lines for slashing in the area where fullness is desired.

4. Cut on the vertical lines and spread slashes the same amount at top and bottom. Keep the horizontal lines even and perpendicular to the center-front.
5. This bodice will have straight fullness - the same amount at top and bottom.
6. Connect slashed lines with a smooth curved line.
7. Complete the pattern. Be sure to mark notches for gathering as well as for the dart.

Example B. Semi-circular fullness

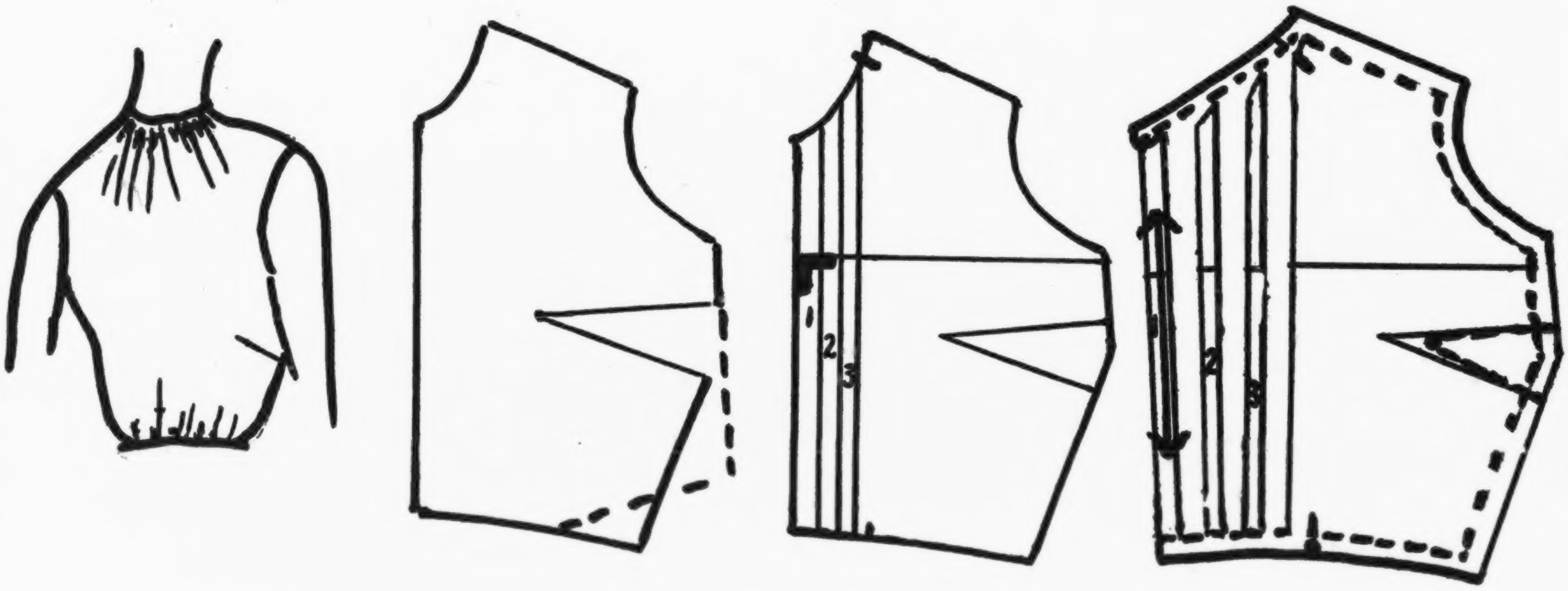


Fig. 121

In this sketch there is more fullness added to the neckline than at the waistline.

1. Using the front sloper, swing waist dart to underarm.
2. Square a line from center-front to form a horizontal grain line.
3. Draw a few vertical lines for slashing in the area where fullness is desired in the design.
4. Cut on the vertical lines and spread slashes so that there is more space at the neck than at the waist. The horizontal line will be slightly curved.
5. This bodice will have semi-circular fullness.
6. Connect slashed lines with a smooth curved line.
7. Complete the pattern. Mark all necessary notches.

Example C. Circular fullness

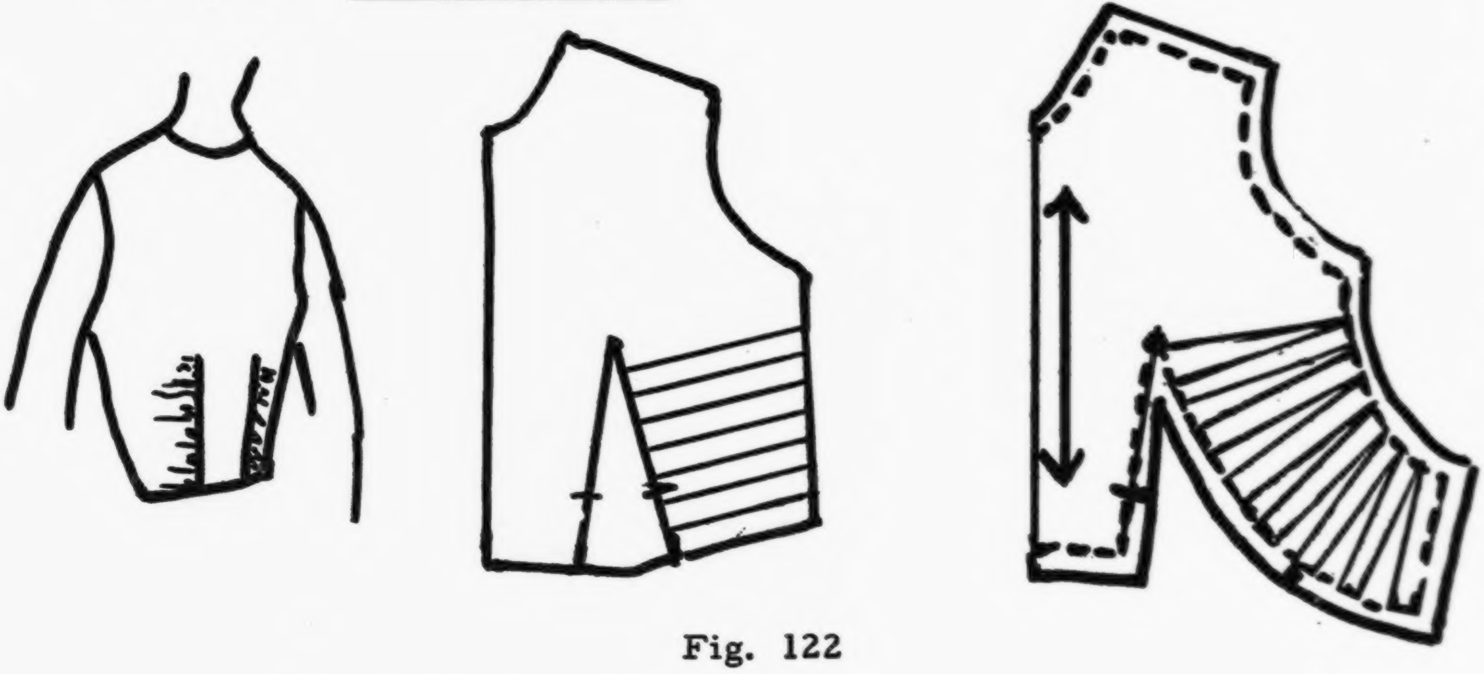


Fig. 122

1. Using basic front sloper, trace on pattern paper.
2. Draw guide lines for slashing from underarm seam to waistline dart.
3. Cut out the dart and slash guide lines from dart opening to side seam, being careful not to cut through side seam. Spread slashes for fullness desired.
4. This bodice will have circular fullness.
   The side seam is changed in shape and grain but measures the same. All of the fullness is gathered to fit into the dart seam.
5. Connect slashed lines with a smooth curve.
6. Complete pattern, including all necessary notches.

ASSIGNMENT:

1. Duplicate examples A, B, and C.

2. Collect six pictures of different types of fullness in bodice fronts.

G. Styling Waists With Fullness

Slashing and Spreading

Lesson 15

OBJECTIVES: To review the principles of slashing and spreading to create fullness.
To learn to replace darts with fullness.

RELATED INFORMATION:

The basic dart control can be: (a) shifted to various angles for styling; (b) divided into multiple darts or dart-tucks to give a softer more feminine effect; and (c) replaced with gathers, shirrings, or decorative smocking to vary the design.

The method of controlling fullness through gathers is obtained by the slash-and-spread method in patternmaking. This means the original pattern is cut, or slashed, in several parallel divisions and then spread apart until you have what you think is the desired amount of fullness. The amount of spread between slashes depends upon the type of fabric and the amount of fullness desired.

In designing styles with fullness it is best to have the fabric available. Only by handling actual fabric can the amount of ease or fullness for a particular style be determined.

In this lesson we will add only the fullness that replaces the shifted basic dart. There will be no additional fullness. The basic dart control will be shifted to shoulder and neck.

Example A. Gathers at the shoulder

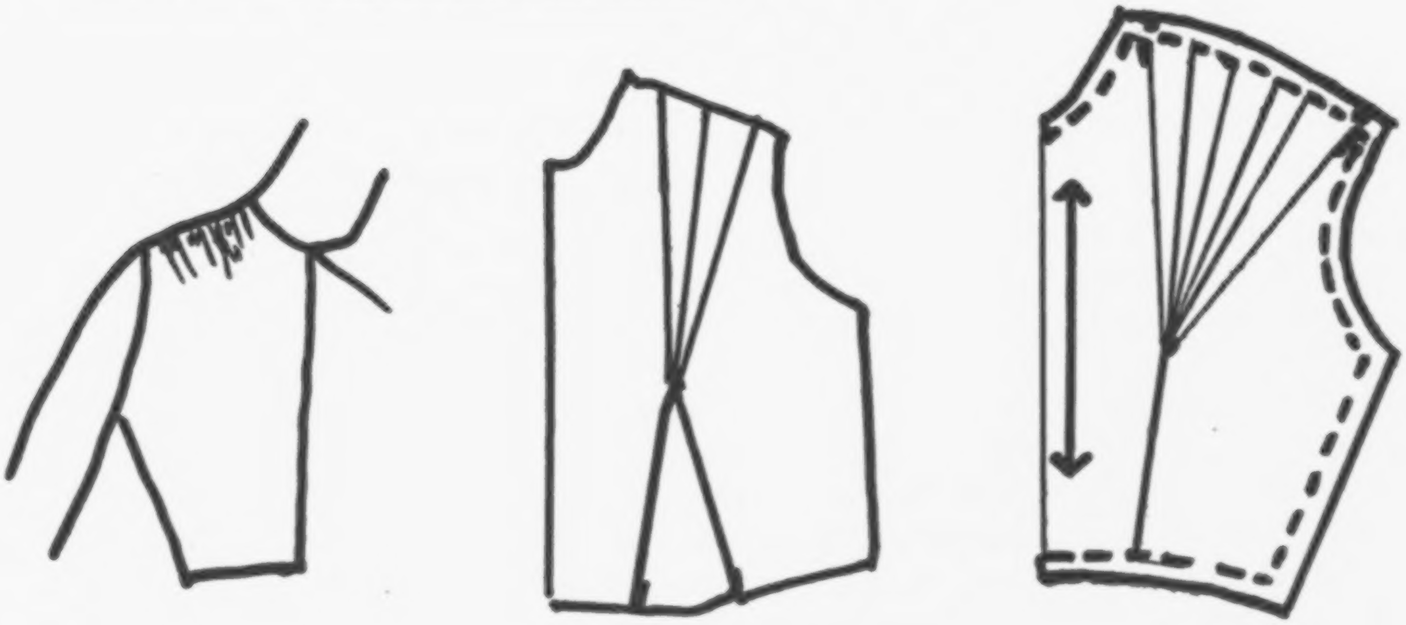


Fig. 123

1. Trace basic sloper with waist dart.
2. Draw three guidelines from shoulder to pivoting point. Keep lines one inch from neckline and one inch from armhole for a smoother fit at neck and armhole.
3. Slash guidelines for shoulder fullness and cut out waist dart.
4. Close waist dart.
5. Spread slash lines so the spaces between them are equal.
6. Pin or scotch-tape in place.
7. Connect shoulder point at neck to armhole with a smooth curved line.
8. Complete pattern.

Example B. Gathers at the neckline

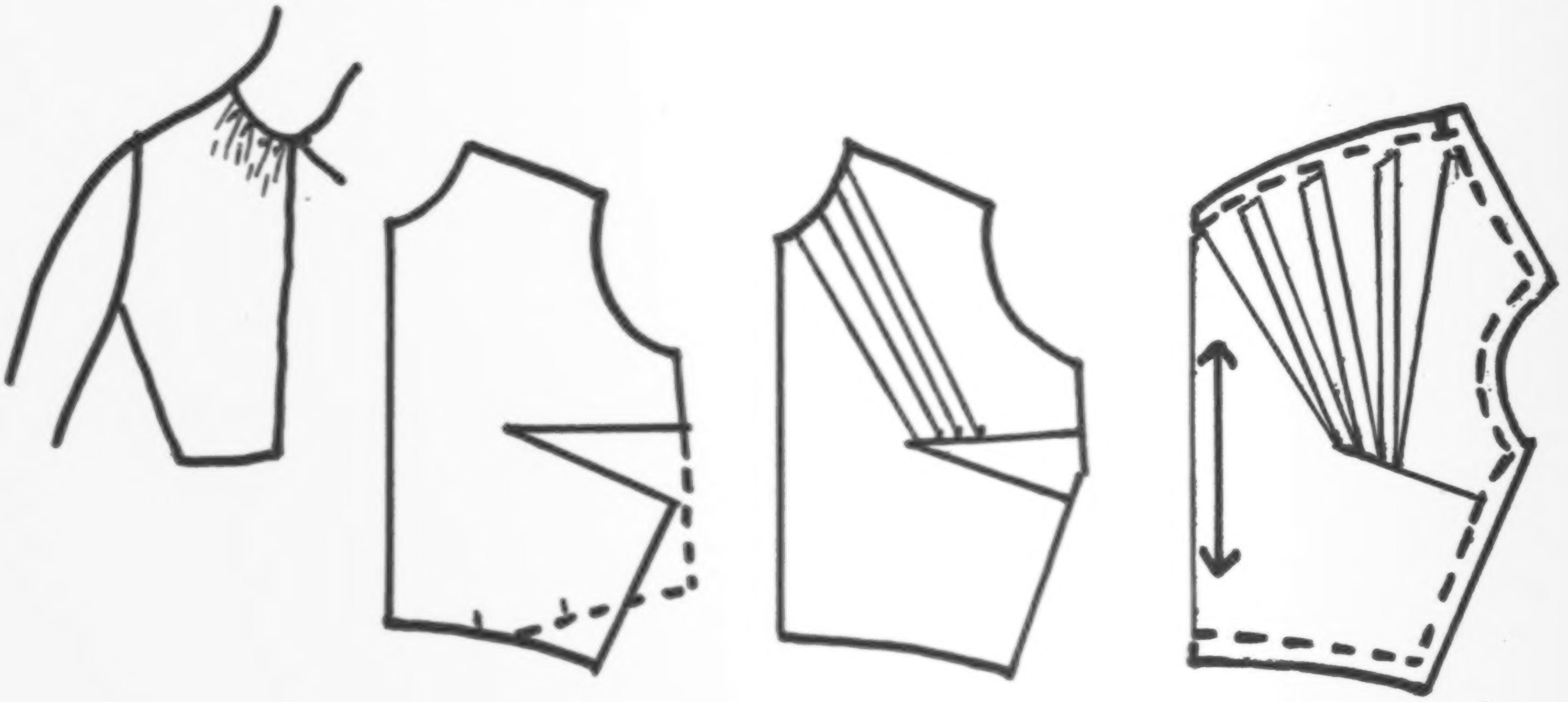


Fig. 124

1. Using the basic sloper, swing waist dart to form underarm dart.
2. Crossmark $1\frac{1}{2}$ inches from pivoting point on dart line.
3. Divide the $1\frac{1}{2}$ inches into three equal parts, and mark them off on dart from pivoting point to crossmark.
4. Mark off three spaces along neckline, starting $\frac{3}{8}$" from center-front, with marks $\frac{3}{4}$" apart. Connect the marks on neckline with the corresponding marks on dart.
5. Cut out underarm dart and slash guidelines for gathers from neckline to dart, being careful not to cut completely through the dartline.
6. Close underarm dart.
7. Spread slash lines so the spaces between them are equal and the pieces form a curve at neckline.
   Note: The neckline has to be redrawn as a continuous line for gathers from front to shoulder. A cloth fitting should be made for final adjustment of the shape of the seamline at the neck. Gather neckline to its original size and make adjustments on the figure. To correct pattern, take out gathers, open fabric flat, and transfer corrections to the paper pattern.
8. Place notches at neckline for area to be shirred.
9. Add seam allowance.

ASSIGNMENT:

1. Develop patterns A and B using both methods.

2. Collect six pictures of front bodices with fullness.

UNIT III - WAISTS

G. Styling Waists With Fullness Using a Dart Combined With Gathers

Lesson 16

OBJECTIVE: To learn to add fullness through the use of darts and gathers.

RELATED INFORMATION:

To introduce fullness in addition to the basic dart fullness, extra slash lines may be added. All slash lines should be placed in the direction you would like the fullness to drape.

Interesting effects may be obtained by combining two or more different methods of control. A dart may very well be combined with gathers in many interesting and effective ways.

The simulated yoke is obtained by cutting the pattern to form a dart and adding fullness but leaving the pattern in one piece.

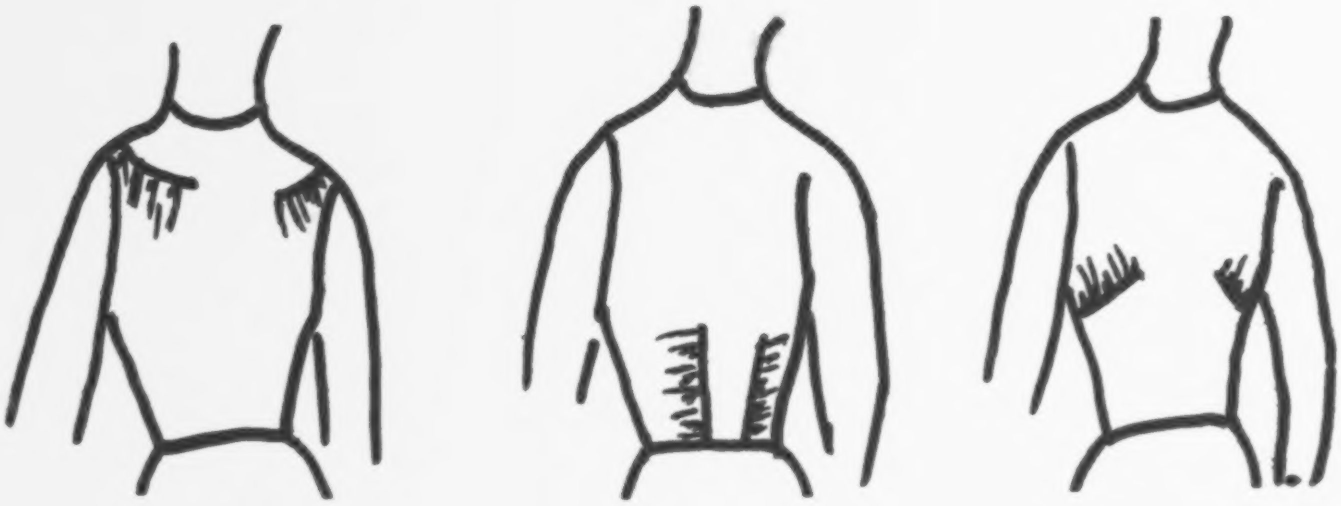


Fig. 125

PROCEDURE:

Example A. Decorative dart space used for gathers at armhole

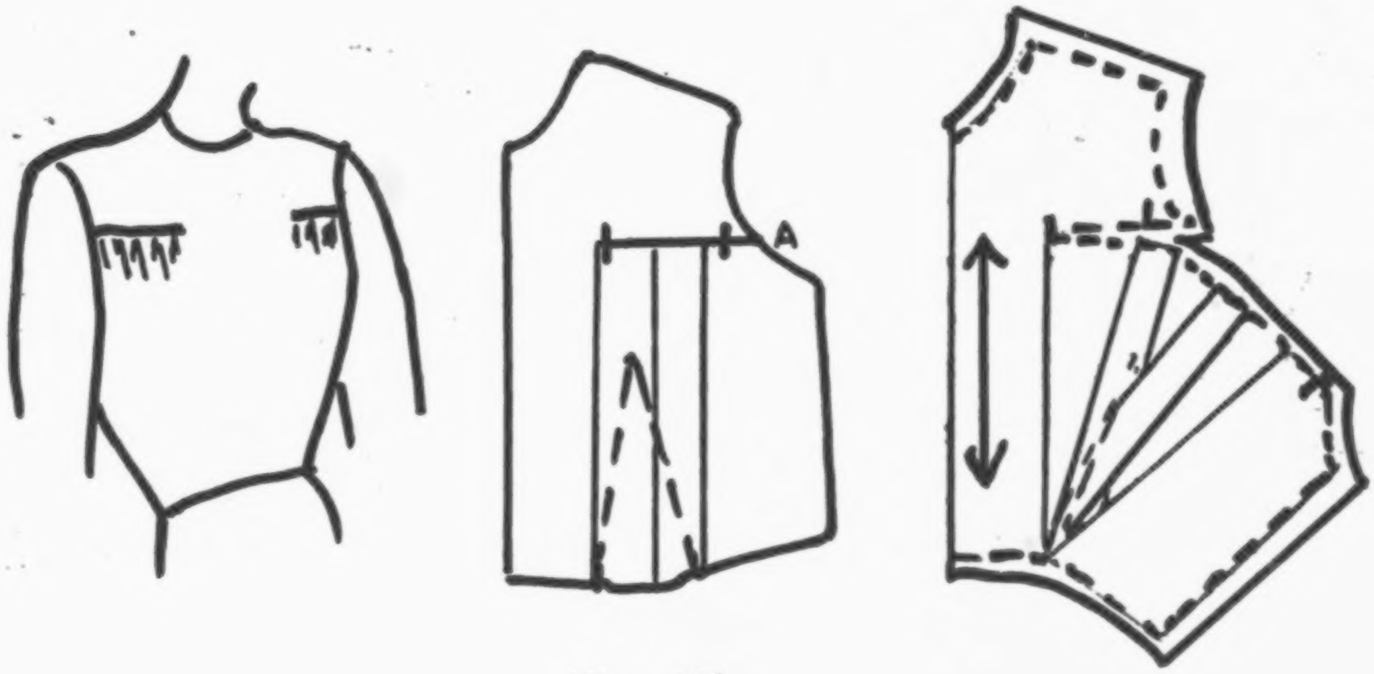


Fig. 126

1. Trace basic sloper on pattern paper.
2. Draw style line for dart at armhole (A).
3. Draw three guide lines from dart position at waist parallel to center front. Crossmark area to be gathered.
4. Slash guide lines and style line for dart at armhole.
5. Close waist dart.
6. Spread guidelines so the spaces are equal and form curved line from armhole to end of style line for dart. Overlap the guideline pieces so that the dart remains closed.
7. In adding the seam allowance on this dart, add $\frac{1}{2}$ inch at the armhole edges and taper off to nothing at the inner edge of the style line.
   Note: This type of dart presents certain difficulties in sewing. The seam must be very carefully marked.

Example B. Slash-and-spread combined with use of the underarm dart

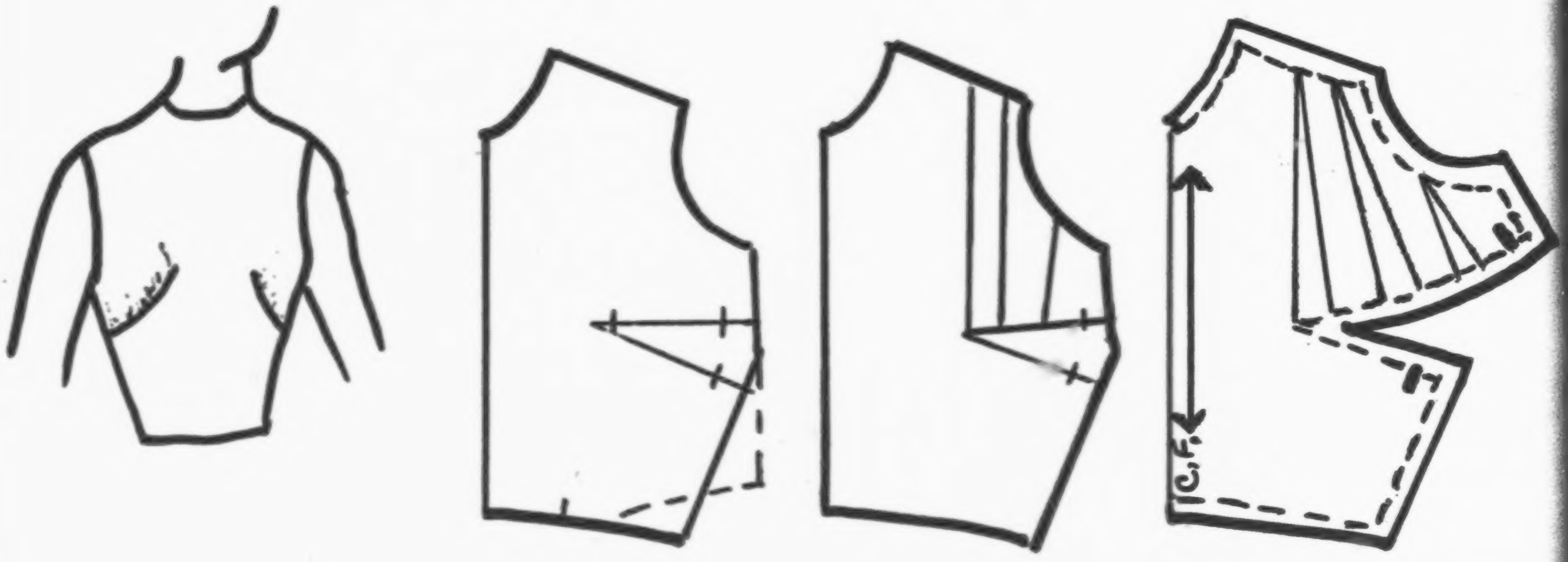


Fig. 127

1. Trace basic sloper and swing waist dart to underarm position.
2. Draw crossmarks on draft to control distribution of fullness.
3. Draw style line along upper edge of dart.
4. Draw guidelines for slashing from style line to shoulder and armhole. Keep these lines within the area for fullness.
5. Cut out underarm dart and slash guidelines, being careful not to cut through outside edge.
6. Spread slash lines so the spaces between are equal and form a smooth curve.
7. Connect underarm edge to point of dart with a smooth curved line.
8. Add seam allowance, tapering from $\frac{1}{2}$ inch at underarm edge to nothing at point of dart.
9. Complete pattern.

ASSIGNMENT:

1. Duplicate patterns A and B.

2. Design three original bodices with darts and gathers and develop patterns for them.

G. Styling Waists With Fullness Using Yokes

Lesson 17

OBJECTIVES:

To learn how to develop patterns with yokes.
To understand the importance of adding seam allowances to all sections of the bodice.
To learn to add fullness and yokes to waists.

RELATED INFORMATION:

The yoke is a shaped piece styled to fit either the upper shoulder of the bodice or the upper area of the skirt. It is used to support the lower part of the garment, which in most cases has some kind of fullness, such as gathers, circularity, pleats, or darts. A yoke may also divide the bodice with a plain seam which may be topstitched, or with decorative seaming that may be applied, such as fagotting, insertion, or slot seams. However, if the part to which the yoke attaches is full, the yoke should be simple in shape, because both parts of a design should not be equally interesting.

In designing the yoke, it is best to keep basic design principles in mind: (a) deep, narrow yokes will create vertical eye movements giving length, and horizontal lines will shorten the figure; (b) the shape of the yoke should be in harmony with the fabric (do not use round yokes for plaids or stripes); and (c) lines should be kept fairly simple and direct (fancy shapes will be difficult to sew).

In making the final pattern of yokes and other sections of a garment, it is very important to add seam allowances to all of the pattern pieces that have been cut apart. By adding seams to these pieces, there will be no loss in the width or the length of the basic sloper.

PROCEDURE:

Example A. **Waist with yoke and no fullness**

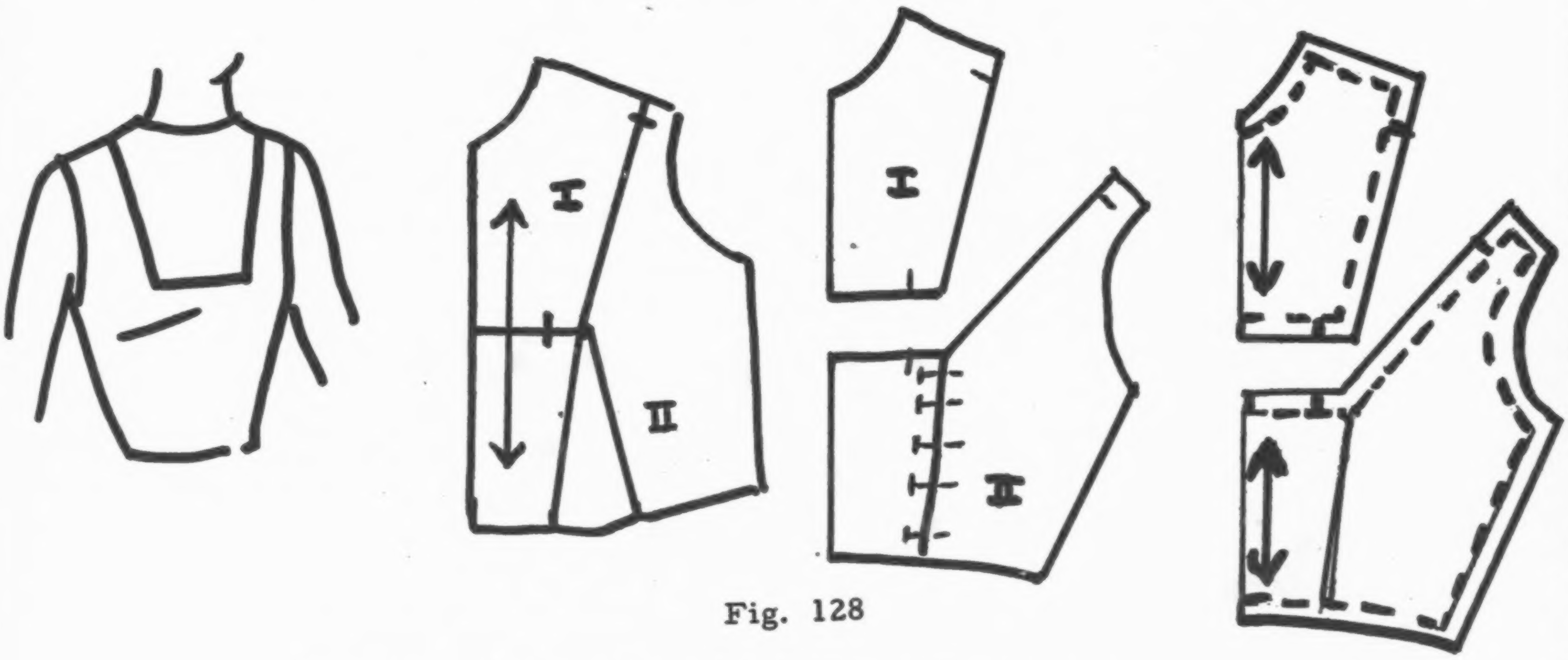


Fig. 128

1. Trace sloper with waist dart on pattern paper.
2. Draw in style lines for yoke.
3. Crossmark yoke and side for seam matching.
4. Trace yoke (I), add seam allowance and notches.
5. Trace lower bodice section (II).
6. Close waistline dart. (In this case the dart control has been thrown into a seam rather than a shoulder dart.) Pin or tape dart.
7. Complete pattern.

Example B. **Straight yoke with full gathered bodice**

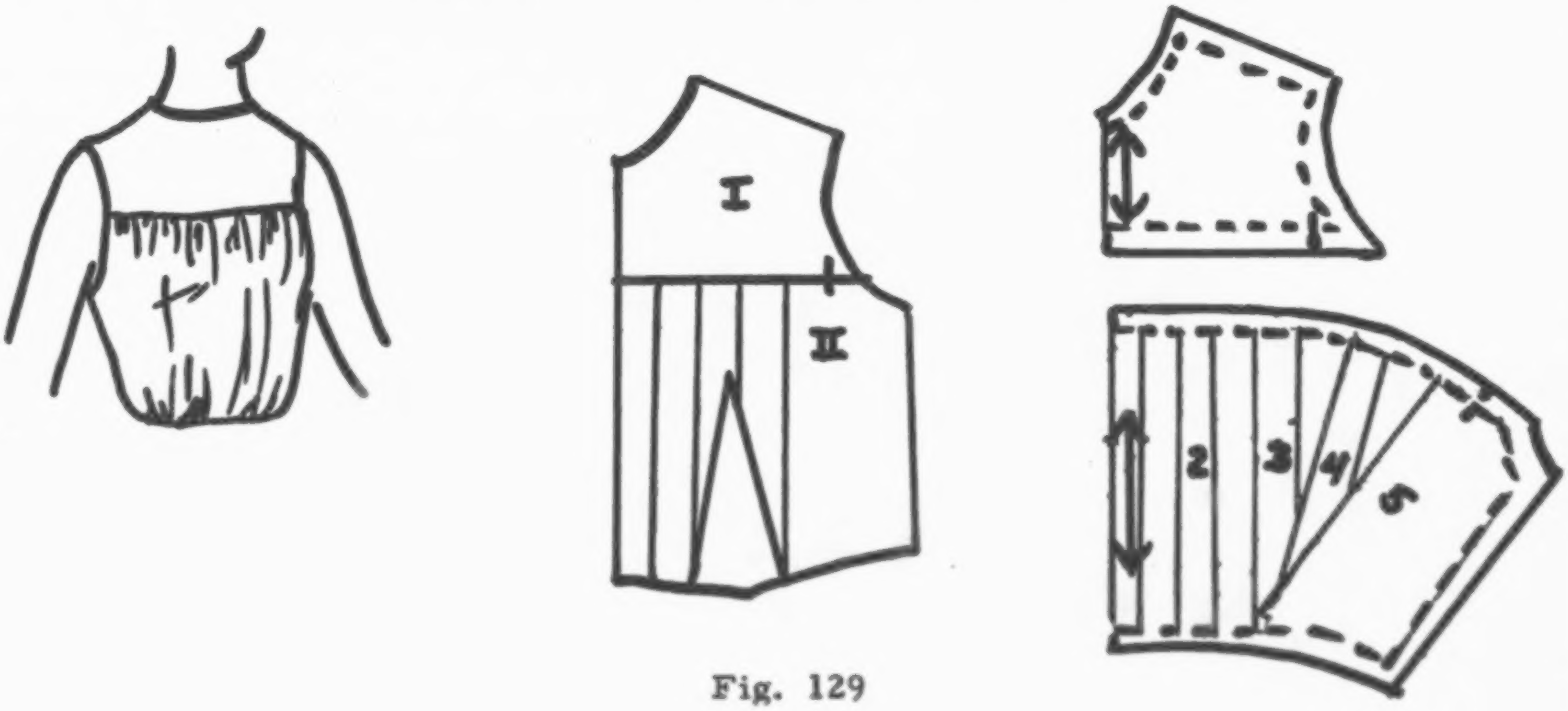


Fig. 129

1. Trace front bodice sloper with waist dart on pattern paper.
2. Draw in style lines for yoke by squaring a line from center-front.
3. Determine position of slash lines from yoke to waistline dart.
4. Crossmark yoke and lower bodice for seam matching.
5. Trace yoke and complete pattern with seams, notches, etc.
6. Trace lower bodice. (Be sure to copy crossmarks, slash lines, and dart.)
7. Cut out the dart, slash on the guidelines for fullness.
8. Close dart and spread slash lines for fullness desired.
9. Complete pattern.

Example C. Shoulder yoke with bib and gathers

A shoulder yoke is any section of a blouse that terminates in the armhole.

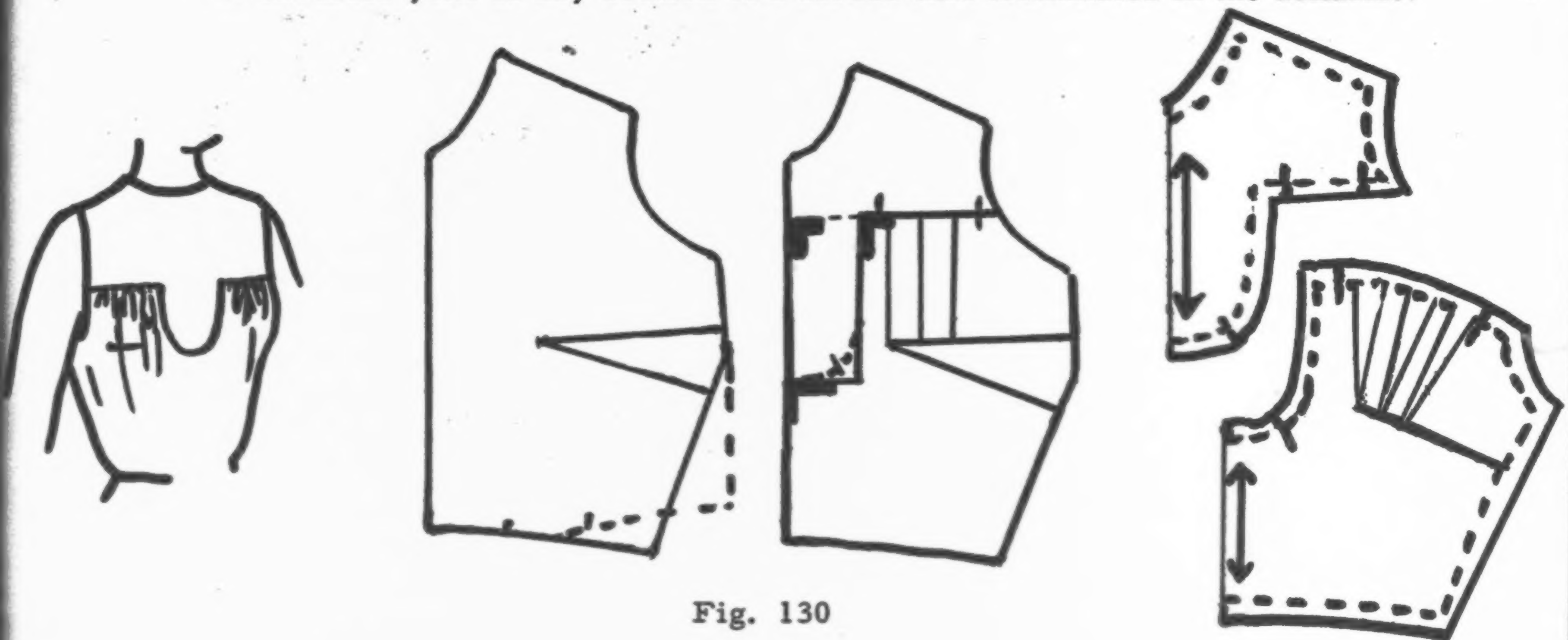


Fig. 130

1. Swing bodice-front sloper with waistline dart to form underarm dart.
2. Square a line from center front to armhole for shoulder yoke.
3. Square a line from center front for bottom of bib.
4. Draw in style line for bib and yoke.
5. Mark guidelines for slashing from yoke to underarm dart.
6. Copy side section. Cut out dart. Slash lines and spread pattern to form gathers.
7. Copy center-front section.
8. Complete pattern. Be sure to have notches for matching yoke to lower section.

ASSIGNMENT:

1. Duplicate A, B and C.

2. The following sketches show front bodices with different yokes. Develop the pattern for three of them.

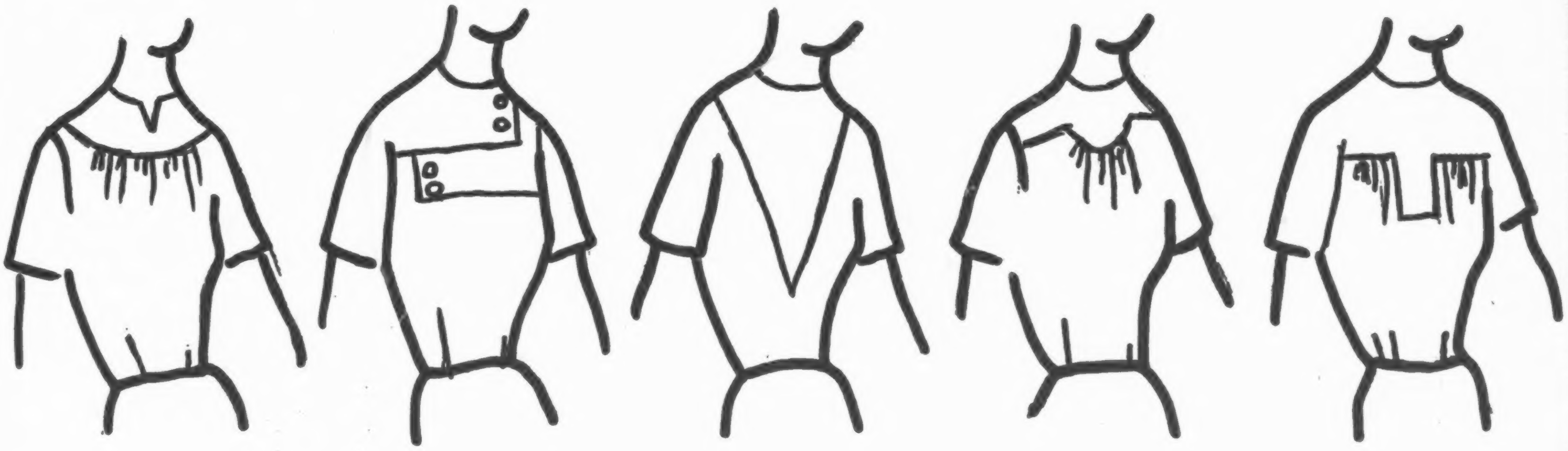


Fig. 131

3. Trace six copies of the bodice front below and design each with interesting yoke details. Develop patterns for three of the six designs.

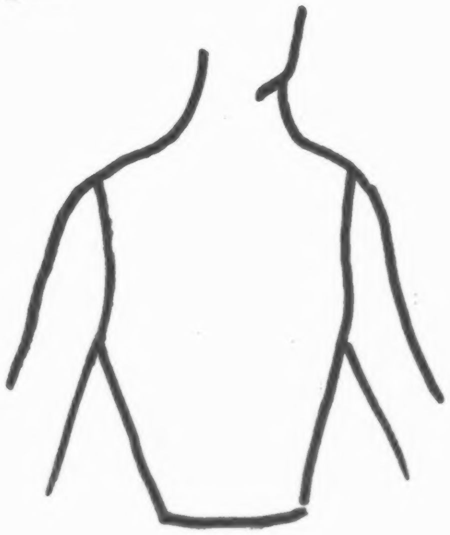


Fig. 132

G. Styling Waists With Fullness
Use of Midriff Sections

Lesson 18

OBJECTIVES: To become familiar with bodice fullness with a smooth-fitting midriff.
To review types of fullness.

RELATED INFORMATION:

A torso-or waist-yoke, better known as a midriff, is a good device for securing fullness over the bust and smoothness around the waistline. Style changes can be developed in the waist yoke just by changing the line of the yoke or by the use of more than one piece in the yoke.

PROCEDURE:

Example A. Shoulder yoke and midriff with straight fullness

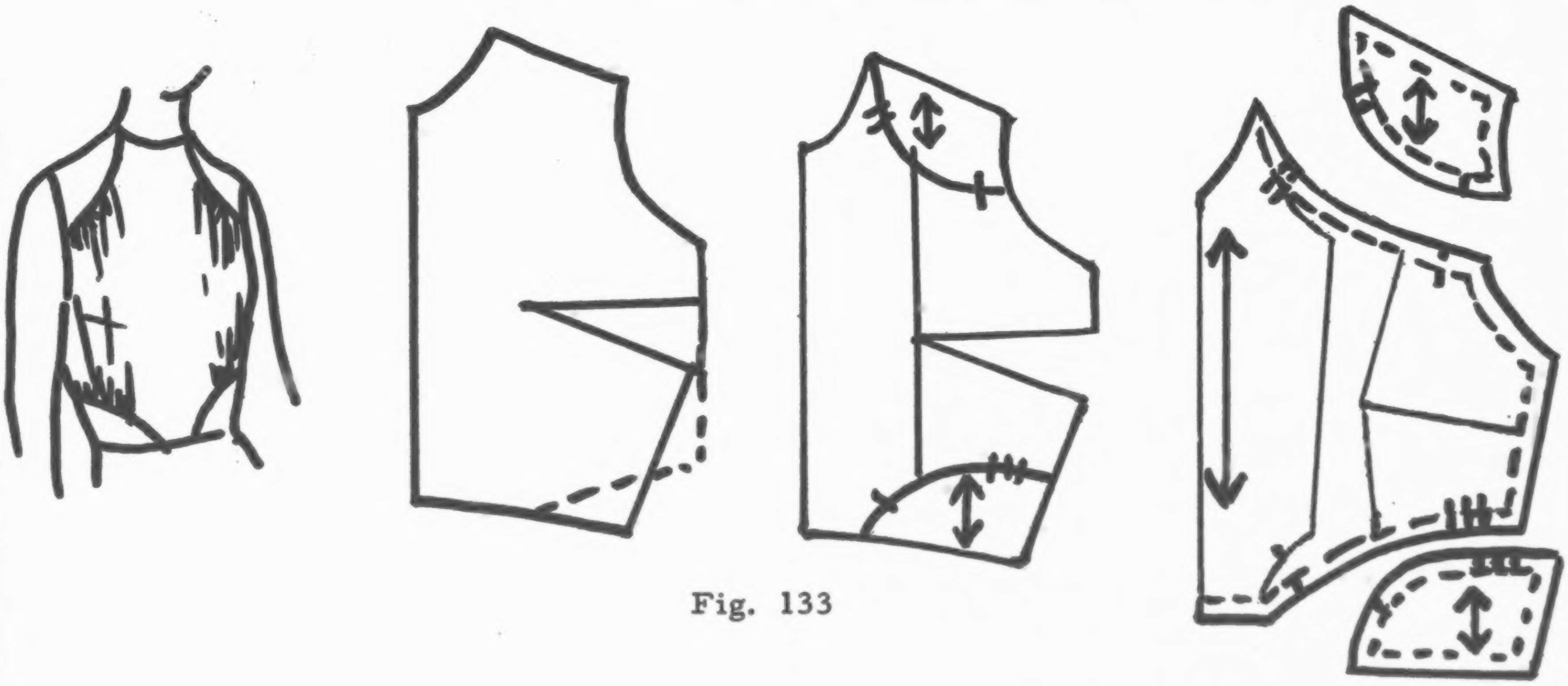


Fig. 133

1. Trace sloper and swing waistline dart to underarm-dart position.
2. Place style lines for yoke and midriff. Start midriff $2\frac{1}{2}$ inches from center-front at waist.
3. Place crossmarks for gathers at the shoulder yoke and the midriff.
4. Draw a slashing guideline for fullness from shoulder yoke to midriff.
5. Establish grain on yoke and midriff sections by drawing line parallel to the center-front.

6. Trace yoke and midriff. Add seam allowance and notches.
7. Trace center section. Be sure to trace dart and slashing guideline.
8. Cut dart and guideline for fullness.
9. Close dart - pin or tape - and allow one inch for fullness between closest points of pattern sections.
10. In drawing finish line, connect slashed lines with a smooth upward curve at the shoulder and a smooth downward curve at the waist. Note: Do not shorten gathered areas.
11. Complete pattern.

Example B. Front midriff section with circular fullness

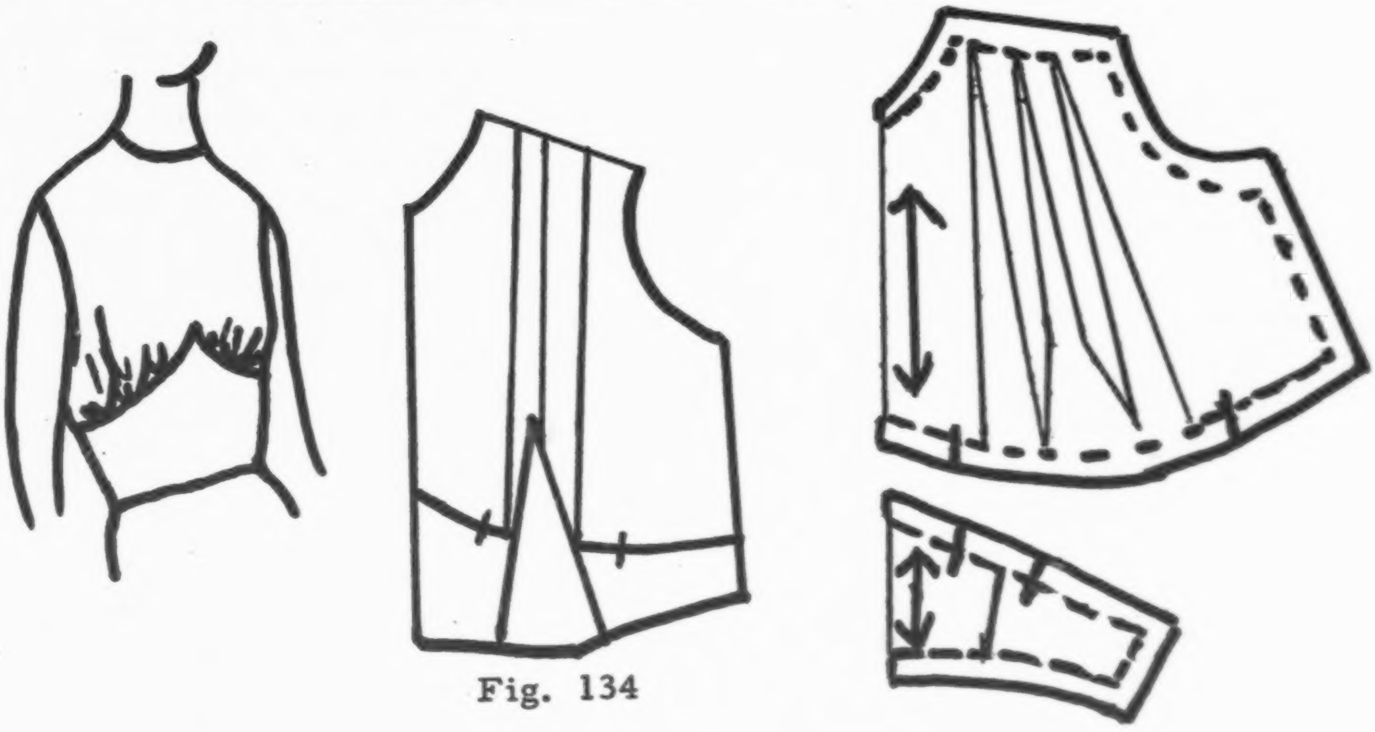


Fig. 134

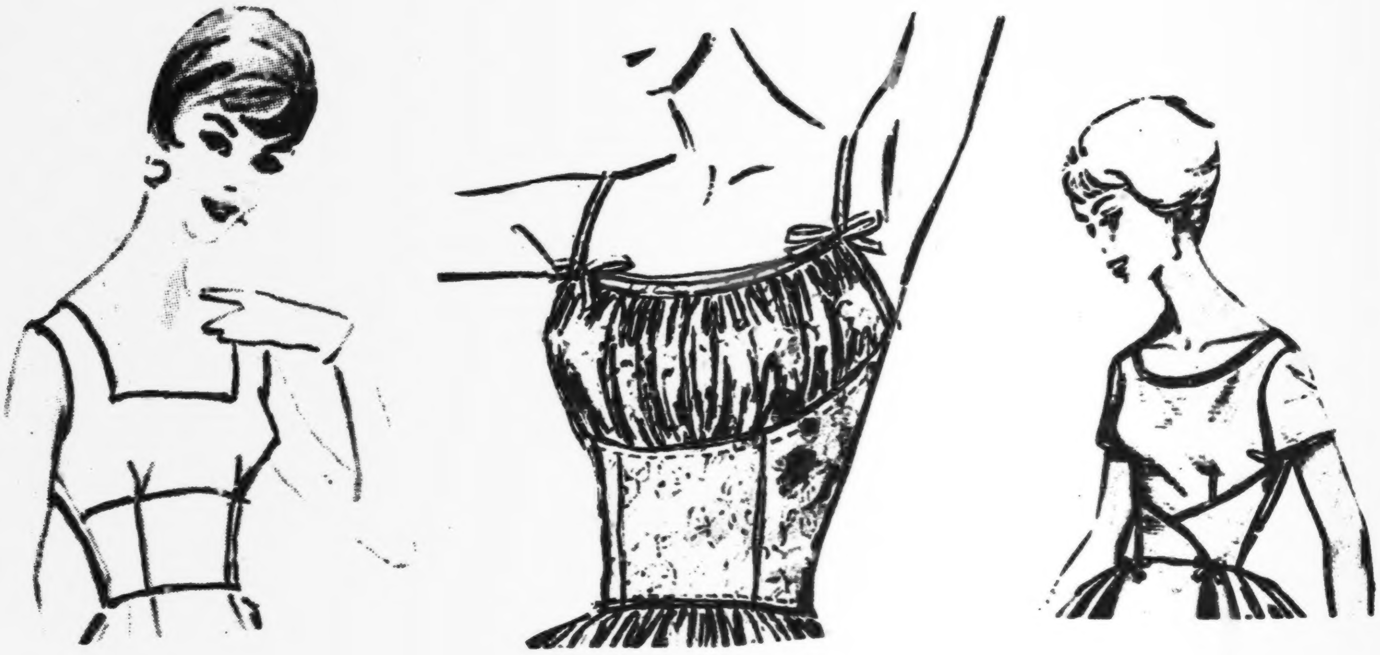
1. Trace the front bodice sloper with the waist dart.
2. Place style line for midriff. (In planning midriff, it is best to work with the figure so that the placement of the midriff section will be flattering.)
3. Draw guidelines for slashing from shoulder to top of midriff. NOTE FOR SLASH LINES -- Slash lines are placed in the direction the fullness is desired. The resulting folds usually lie in the same position in which the slashes are spread.
4. Place crossmarks for gathers at midriff and bodice. (These will be the necessary notches for joining midriff to bodice.)
5. Trace midriff section.
    a. Cut out dart and pin closed.
    b. Smooth style line and add seam allowance, grain, and notches.

6. Trace bodice section.
    a. Cut slash guidelines and spread for fullness desired. Note: The shoulder seam remains the same--all the fullness is added to the bottom.
    b. Draw the finish line at the bottom with a smooth curve.
    c. Complete pattern--add seam allowance, grain, and notches.

ASSIGNMENT:

1. Duplicate the two patterns, A and B.

2. Make patterns for two of the sketches below.



#105 #210 #440

Fig. 135

UNIT III - WAISTS

H. Styling Waists With Tucks or Pleats
Slashing and Spreading

Lesson 19

OBJECTIVES: To review the method of figuring the amount of fabric required for tucking or pleating.
To become familiar with the type of garment that uses tucks or pleats.
To learn the method of slashing and spreading for tucks or pleats.

RELATED INFORMATION:

A tuck is a stitched fold in the fabric for the purpose of decoration. The size of the tuck is measured from stitch to folded edge. A tuck uses fabric twice the width of the finished tuck. Therefore a $\frac{1}{8}$-inch tuck will use $\frac{1}{4}$ inch of extra fabric. Tucking is often used to add texture interest to otherwise flat fabrics such as organdy, voile, chambray, broadcloth, and flat crepes. The space between the tucks varies and is determined by the size range of the garments (misses, womens, or half-sizes), the fabric, and the design you wish to create through the use of tucks.

In the garment industry there are special firms that handle tucking, shirrings, and pleatings. The fabric is sent out to be tucked and when the tucking is completed and returned to the manufacturer, the pattern is placed on the tucking and cut.

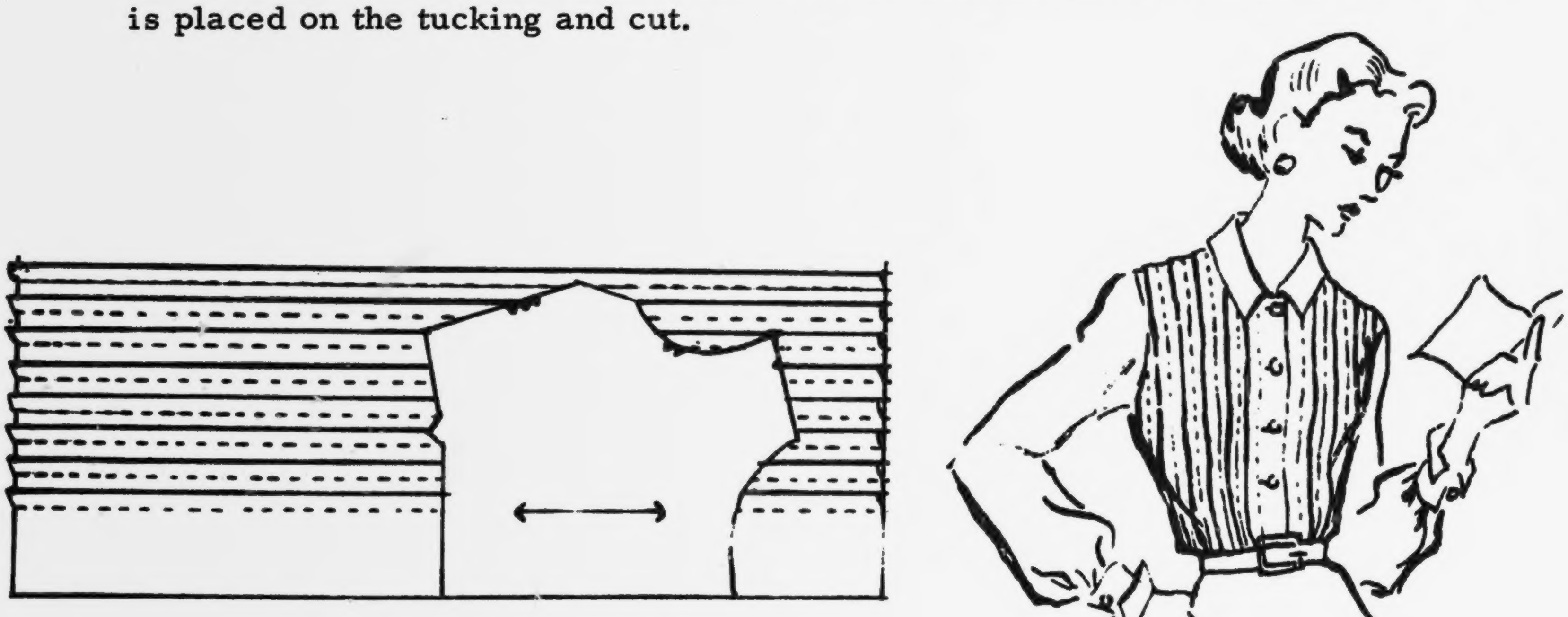
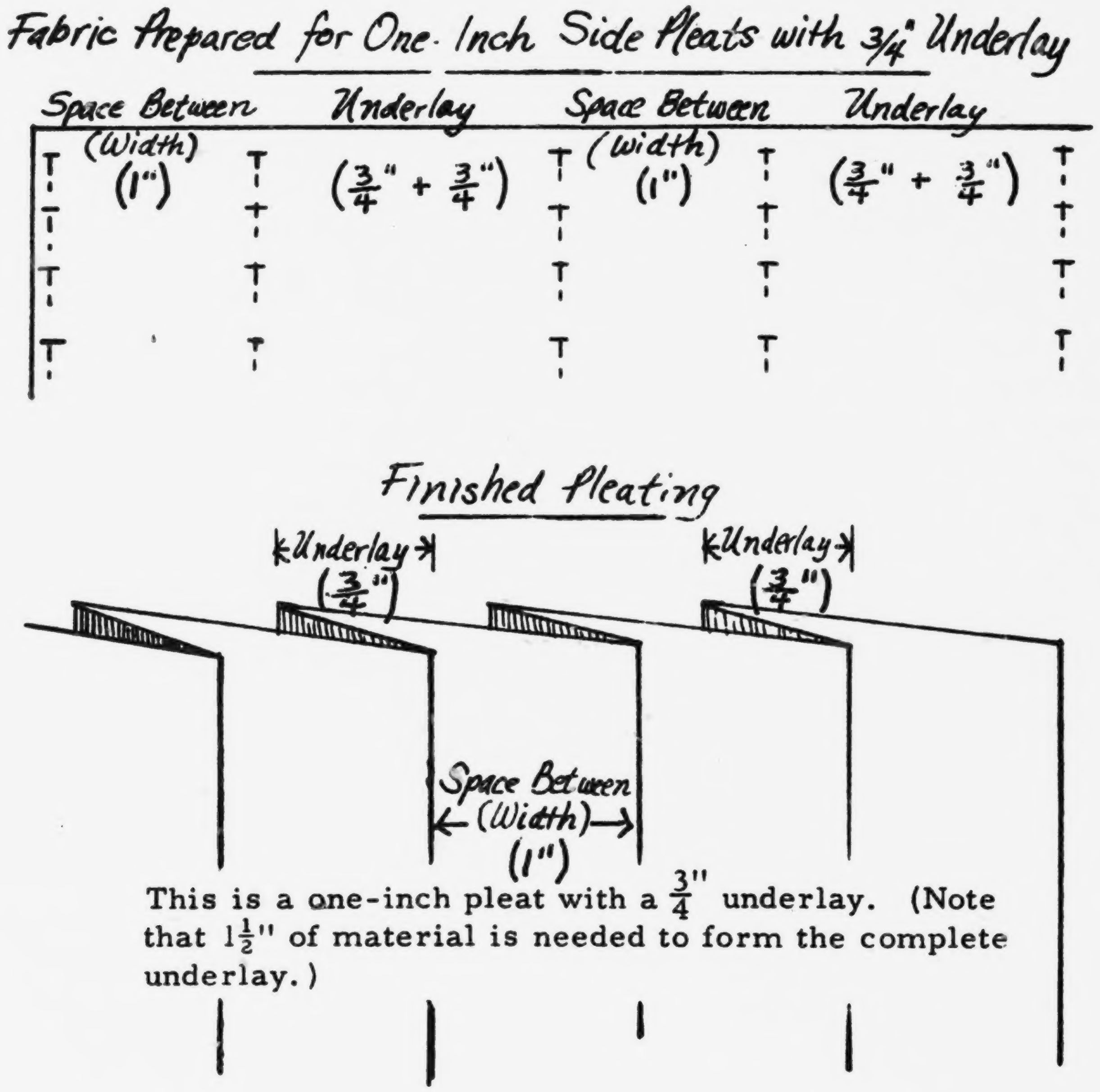


Fig. 136

A pleat is a fold in the fabric that releases fullness. The underlay or depth of the pleat is the amount of the material from the outside fold of the pleat to the inside fold of the pleat. (The actual measurement of the fabric needed to form the underlay will be twice the depth.) If the depth of the pleat is one inch, you will need two extra inches of fabric for each pleat. Pleats are developed exactly like tucks, but in the finished garment they are unstitched or stitched only part way down. If folds are stitched - either right side out or wrong side out - through two layers the same distance from the fold, they are tucks or dart-tucks, but if after folding down on the right side they are top-stitched through three layers, they are pleats.

The following diagrams show the formation of a single pleat:


Fabric Prepared for One Inch Side Pleats with 3/4" Underlay
Space Between (Width) (1")
Underlay ($\frac{3}{4}$" + $\frac{3}{4}$")
Space Between (Width) (1")
Underlay ($\frac{3}{4}$" + $\frac{3}{4}$")
Finished Pleating
Underlay ($\frac{3}{4}$")
Underlay ($\frac{3}{4}$")
Space Between (Width) (1")

This is a one-inch pleat with a $\frac{3}{4}$" underlay. (Note that $1\frac{1}{2}$" of material is needed to form the complete underlay.)

Fig. 137

PROCEDURE:

This lesson will cover the slash-and-spread method for adding tucks or pleats to a front bodice. Before planning the position or space between tucks or pleats, a horizontal line must be drawn across the draft for balancing pattern after slashing. Remember to (a) square a line from center-front to form horizontal line; (b) draw in vertical lines for tucks; and (c) draw a horizontal line on fresh piece of paper for matching to horizontal line drawn on draft.

The horizontal line is drawn when planning vertical tucks. In planning horizontal tucks or pleats, the center-front of the draft is placed on a vertical line drawn on a fresh piece of paper.

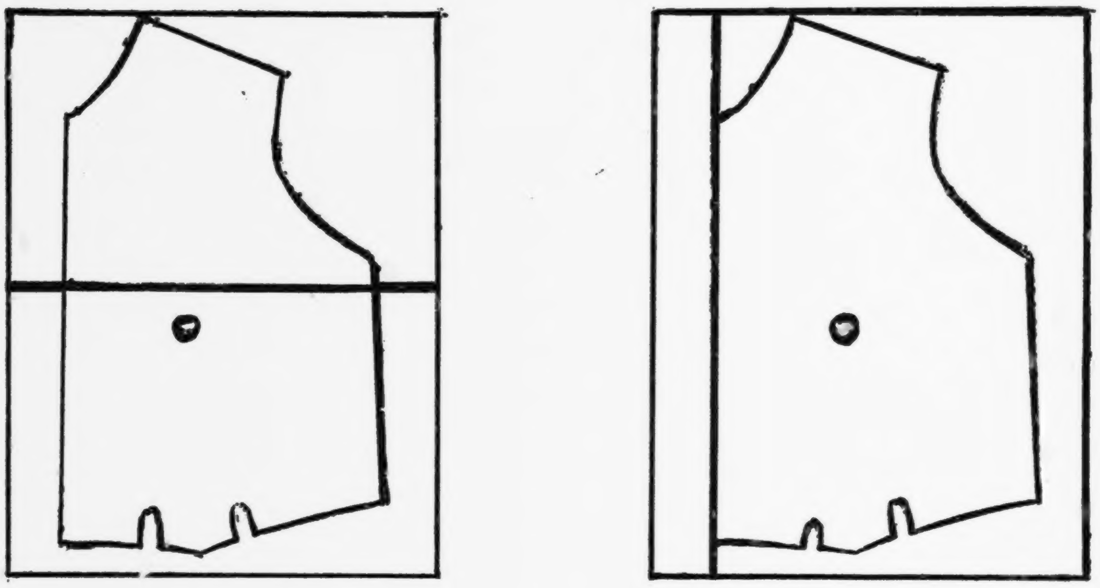


Fig. 138

Example A. Front bodice with vertical tucks or pleats

In styling a bodice with vertical tucks or pleats, it is best to work with the underarm dart. Since a pleat or tuck is folded right on the straight grain of the fabric, you cannot hide the dart under a pleat. The dart at the underarm will be out of the way of the tucks or pleats you intend to include in your design. Some dart control is always necessary in waists in addition to the tucks or pleats.

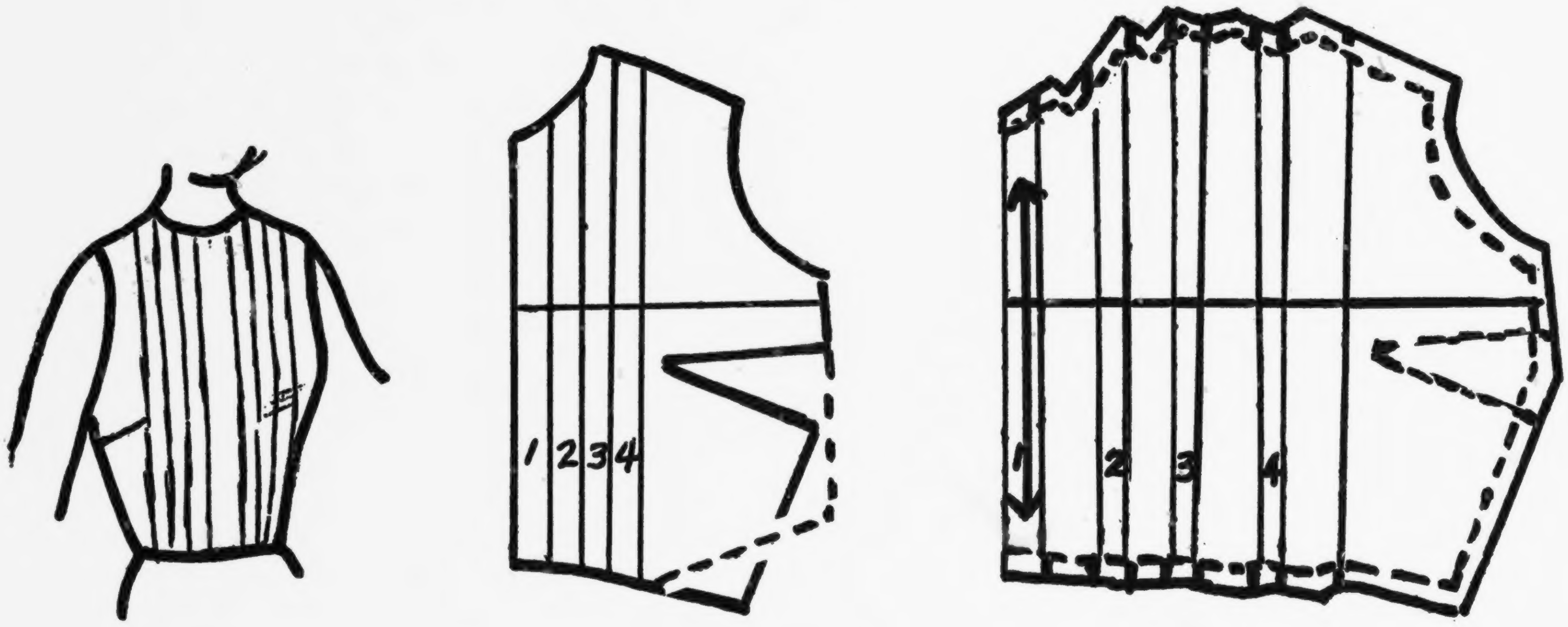


Fig. 139

1. Trace the sloper and swing waistline dart to underarm-dart position.
2. Determine position of tucks or pleats. Draw vertical lines, parallel to center-front.
3. Draw horizontal line for balancing pattern after slashing.
4. Draw horizontal line on a fresh piece of paper.
5. Number four sections before cutting.
6. Slash tuck lines (using $\frac{1}{4}$-inch tuck, you will need $\frac{1}{2}$ inch extra fabric for each tuck).
7. Pin sections to paper, leaving $\frac{1}{2}$ inch for each tuck between slash lines.
8. True the tuck or pleat lines by folding pattern on the lines as they will appear on the finished garment.
9. Complete pattern. Be sure to mark notches for stitching lines of tucks or pleats.

Example B. Front bodice with horizontal tucks

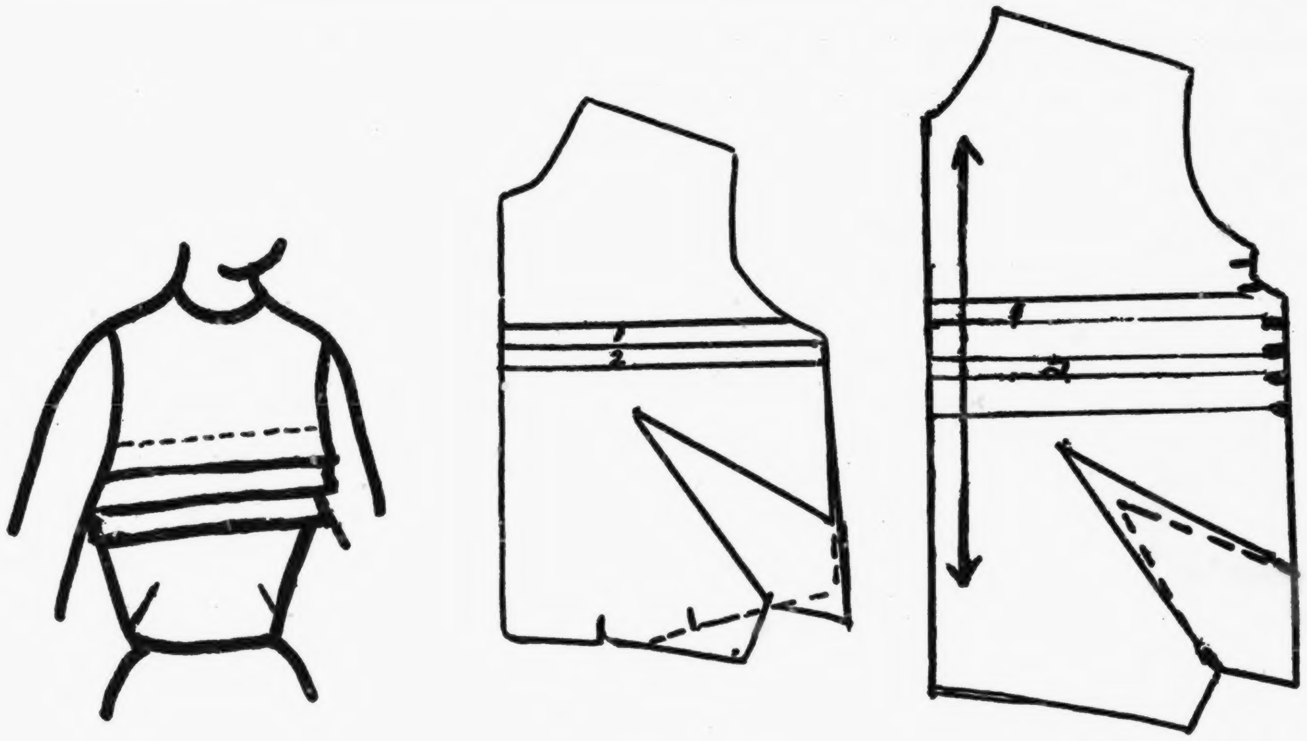


Fig. 140

1. Trace the sloper and swing waistline dart to French dart position.
2. Determine position of tucks. Draw horizontal lines, squaring from center-front.
3. Draw a vertical line on a fresh piece of paper.
4. Number sections before cutting.
5. Slash tuck lines. (For this style we will use a one-inch tuck with a one-inch space. You will have to allow two inches extra for the fabric needed for each tuck.)
6. Pin or Scotch-tape sections to paper, leaving two inches for tucks between pattern pieces. (Be sure to place center-front along vertical line drawn on pattern paper.)
7. True the tuck lines by folding pattern on the lines as they will appear on the finished garment.
8. Complete pattern.

ASSIGNMENT:

1. Duplicate examples A and B.

2. Using the slash-and-spread method, work out the following groups of tucking: (a) 3 tucks, $\frac{3}{8}$ inch with $\frac{1}{2}$ inch space; (b) 4 tucks, $\frac{1}{2}$ inch with $\frac{3}{4}$ inch space; and (c) two tucks, one inch with one inch space.

3. Bring in five pictures of dresses using horizontal tucks.

4. Bring in three pictures of dresses using vertical pleating.

5. Design four front bodices using different arrangements of tucking.

H. Styling Waists With Tucks or Pleats

Folding Paper for Tucks and Pleats — Lesson 20

OBJECTIVES: To understand the method of patternmaking in which the pattern paper is folded to form tucks and pleats before the pattern is completed.

To understand the method used in industry for manufacturing styles with tucks or pleats.

RELATED INFORMATION:

In the garment industry, there are special firms that handle tuckings and pleatings to be used in the making of dresses. If the design calls for pin tucks, which are $\frac{1}{8}$ inch or smaller, the tucking is done in the fabric first. Wider tucks or pleats may also be worked out in this manner. If a style has a few tucks that are short, these can be done by the operator. When the tucks are to be sewn by the operator, the pattern must: (a) include the necessary fabric for these tucks; (b) be notched or drawn very carefully. (Marks may be stamped rather than notches cut - depending on the price of the garment.)

Besides slashing and spreading for tucks and pleats, another method used is folding paper the size of tucks or pleats before styling patterns. Using the folding method, you will be able to visualize the tucking as received from a tucker. To form the pleats or tucks, it is important to measure accurately and to draw straight lines.

Example A. Use of the folding method for forming vertical tucks or pleats.

For this style we will use a two-inch boxpleat in the center with three one-inch side pleats with a one-inch underlay.

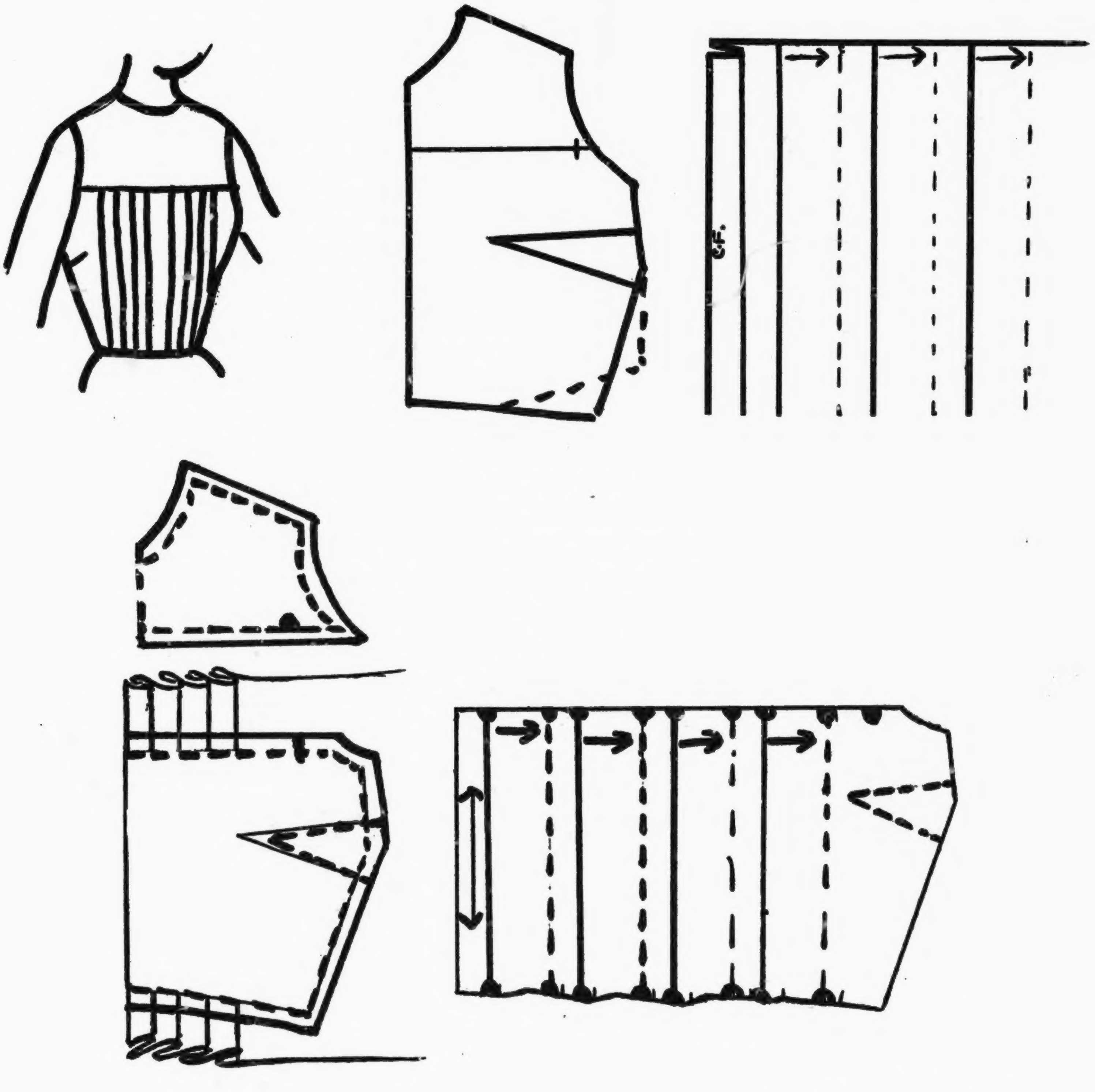


Fig. 141

The pattern for both yoke and lower bodice must be developed before working tucks or pleats.

1. Swing basic front sloper to form the underarm dart.
2. Draw in yoke style line.
3. Place crossmark for matching yoke to lower section.
4. Draw a vertical line on a fresh piece of pattern paper for center-front.
5. Working from center-front, draw as many parallel lines as are needed to form the folded edges of the tucks or pleats.
6. Fold on lines to form pleats or tucks.
7. Trace lower section of front bodice as follows:
    a. Place lower section on pleated paper.
    b. Be sure center-front of draft is placed on center-front line on folded pattern paper.
    c. Trace around edge of pattern piece and then add seam allowance before cutting out.
    d. Opened up, the pattern should be clearly labeled to show lines to be folded and lines the folds should meet.
    e. Complete lower section of pattern.
8. Trace yoke pattern and add seam allowance, notches, grain, etc.

ASSIGNMENT:

1. Duplicate pattern A.

2. Make patterns for the following waist fronts, using the folding-paper method. In each case, decide on the most suitable position for the dart control.

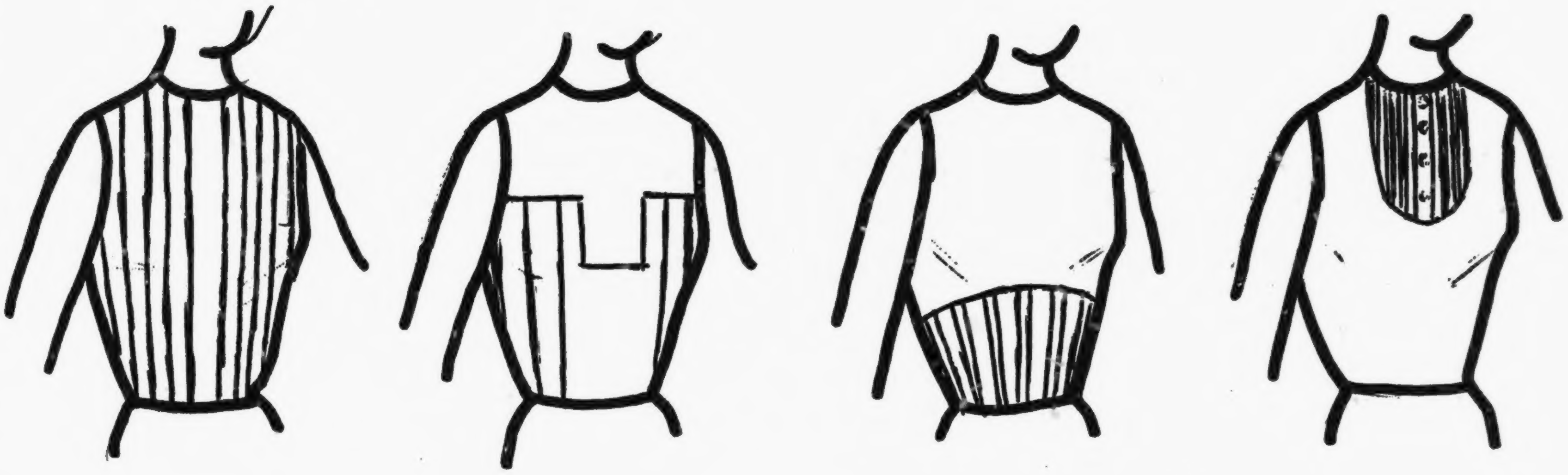


Fig. 142

UNIT III - WAISTS

I. Styling Bodice Backs
Using Yokes With Fullness

Lesson 21

OBJECTIVES: To learn how to develop a bodice back with a yoke.
To review the principles of adding fullness.
To learn how to add fullness to the basic back sloper.

RELATED INFORMATION:

When styling dresses with back yokes, it is best to keep in mind fabrics that have body and are suited to tailoring. Back yokes may be narrow, deep, or the shirtwaist type (a combined back and front shoulder yoke). The style line of the yoke may be straight, curved, or decorative.

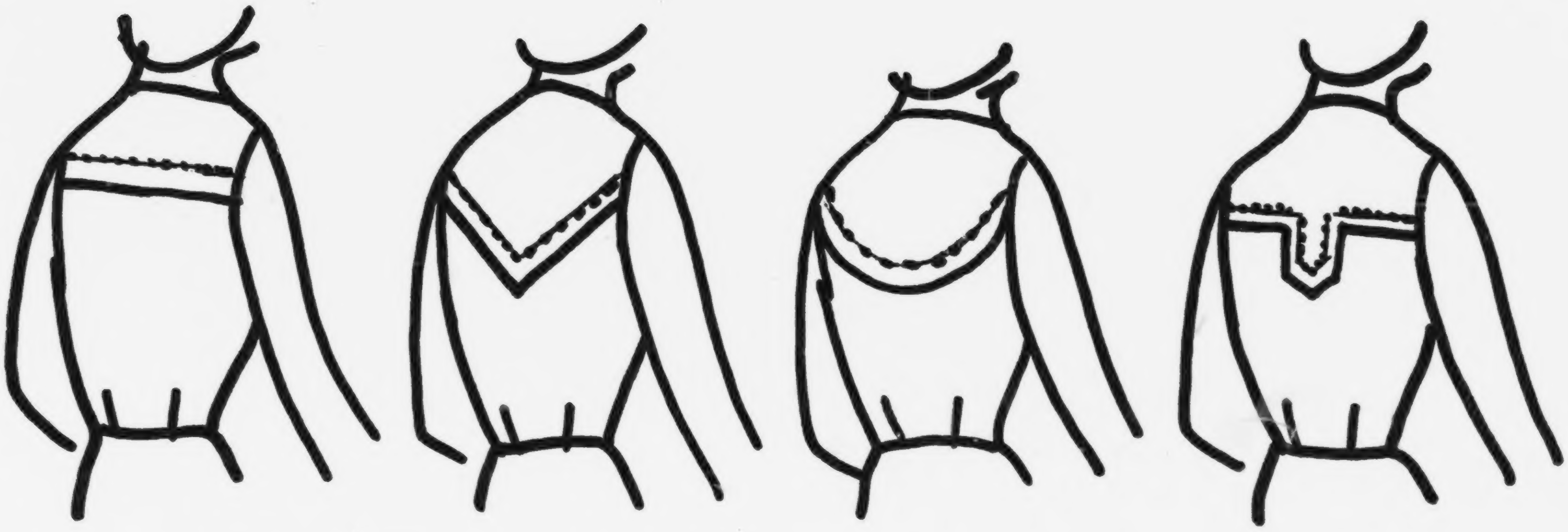


Fig. 143

In developing the back yoke pattern, it is important to be sure it fits smoothly over the shoulder blade. For narrow yokes, the dart or ease at the back shoulder in the basic sloper must be taken out. The dart may be left in the deep yokes to provide fullness at the shoulder blade.

PROCEDURE:

Example A. Straight yoke with circular fullness
(No fullness added at the waistline.)
Note: The basic waistline dart will be gathered or eased to fit the waist measurement.

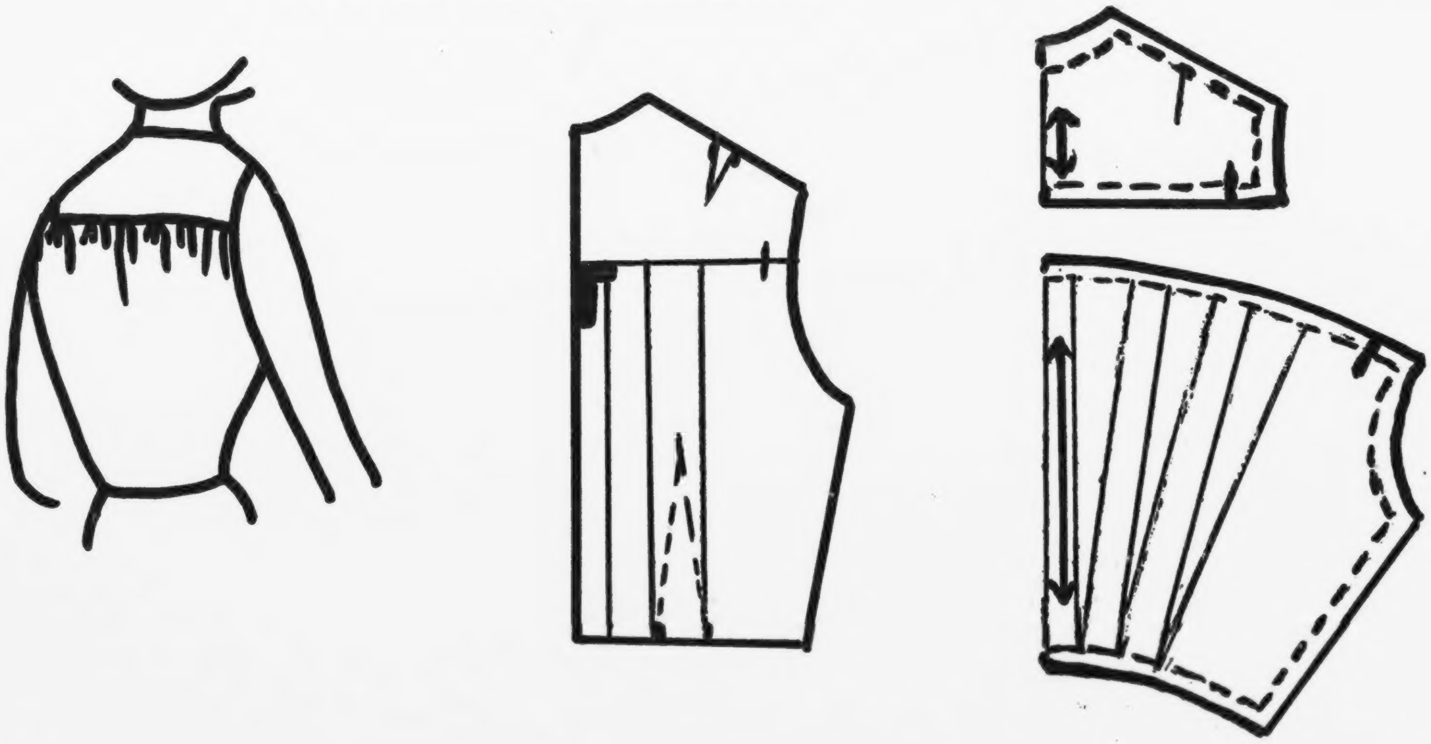


Fig. 144

1. Trace basic bodice sloper and swing one-half of waist dart to form shoulder dart.
2. Determine style line for yoke. Square a line from center-back to armhole.
3. The fullness in the lower bodice will go across the complete back. However, for at least one inch from the armhole the bodice should be smooth. Crossmark position for matching yoke to lower bodice one inch from armhole.
4. Draw in vertical slash lines for fullness desired.
5. Trace yoke section.
    a. Close shoulder dart. Straighten shoulder seam and blend style line.
    b. Add grain, notches, and seam allowance.
6. Trace lower section of back bodice.
    a. Slash vertical lines of lower back bodice from top to waist. Do not cut apart at the waistline.
    b. Spread slashes until the desired fullness is obtained.
    c. Complete pattern--notches, grain, seam allowance.

Example B. Curved yoke with straight fullness
(Fullness added to top and bottom of back bodice.)
Note: Dart at waist will be gathered along with the added fullness.

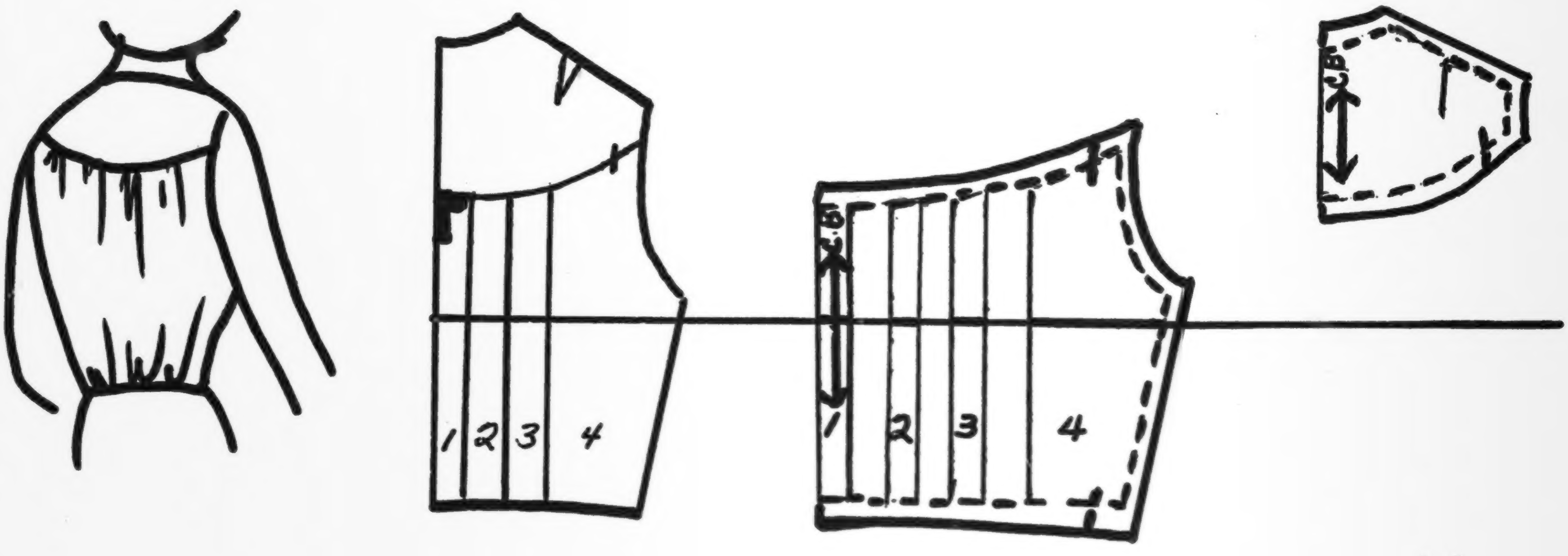


Fig. 145

1. Trace back bodice sloper and swing one-half of waist dart to form shoulder dart.
2. Determine style line for yoke. Square a line from center-back for one-half inch. Draw in remainder of style line.
3. Crossmark position for matching yoke to lower bodice - one inch from armhole.
4. Draw in vertical slash lines for fullness desired.
5. Since the vertical slashes cut through both the upper and lower edges of the pattern, a horizontal grain line is drawn before cutting. Square a line from center-back to underarm seam. (Number sections of lower bodice.)
6. Trace yoke section.
    a. Close shoulder dart and smooth shoulder seam and style line.
    b. Add notches, seam allowance, and grain line.
7. Trace lower section of back bodice.
    a. Draw a horizontal line on a fresh piece of paper.
    b. Slash vertical lines of lower back. (Be sure these pieces have been numbered.)
    c. Pin slashed pieces so the horizontal line is placed on the horizontal line drawn on the paper, leaving spaces for fullness desired.
    d. Draw a smooth line connecting center-back to armhole at the top.
    e. Draw a smooth line at the waist connecting center-back to underarm seam.

f. Complete pattern for lower back bodice. Be sure to add seam allowance, notches, grain, etc.

ASSIGNMENT:

1. Duplicate patterns A and B, using a 2:1 ratio for fullness.
2. Duplicate patterns A and B, using a 3:1 ratio for fullness.
3. Bring in five pictures with different back-yoke interests. Make patterns for two of these styles.

UNIT III - WAISTS

I. Styling Bodice Backs
Using Yokes With Pleats

Lesson 22

OBJECTIVES: To learn the difference between box and inverted pleating. To learn how to develop bodice backs with yokes and inverted and box pleats.

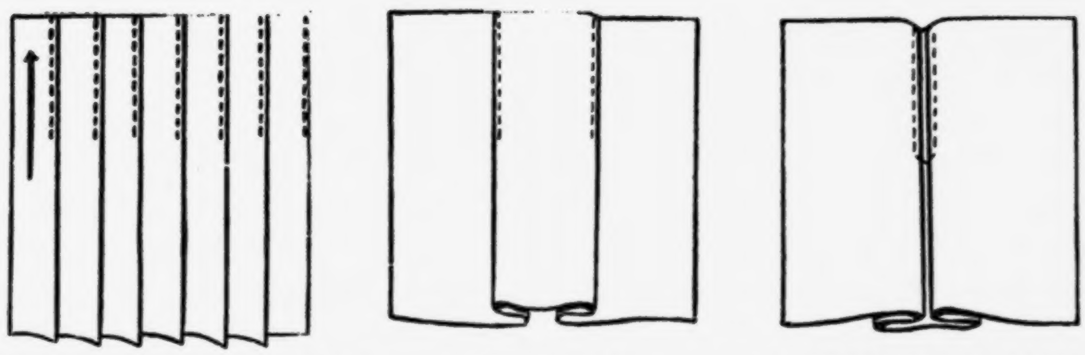
RELATED INFORMATION:

Pleats can be prepared by the dressmaker or, as in the garment industry, sent out to a shop that will do steam pleating--sometimes called machine pleating.

A pleat is a fold in the fabric that releases fullness. For most back bodices, straight pleats are used. Pleats are designed on the straight of fabric. The straight pleats cover such types as knife or side pleats, box pleats, and inverted pleats.

Pleated waists usually set better if the top fold of one pleat meets the underfold of the next pleat. Hence, each pleat requires three times its own width. If this takes too much fabric or is too bulky, the pleats can be spaced to suit style and fabric.

The knife or side pleat is a group of pleats going in the same direction. A box pleat is a pair of side pleats folded away from each other. When folded to meet each other, they are called inverted pleats.



STRAIGHT OR KNIFE PLEATS **BOX PLEATS** **INVERTED PLEATS**

Fig. 146

PROCEDURE:

Example A. Bodice back with yoke and inverted pleat
(The dart appears as gathers.)

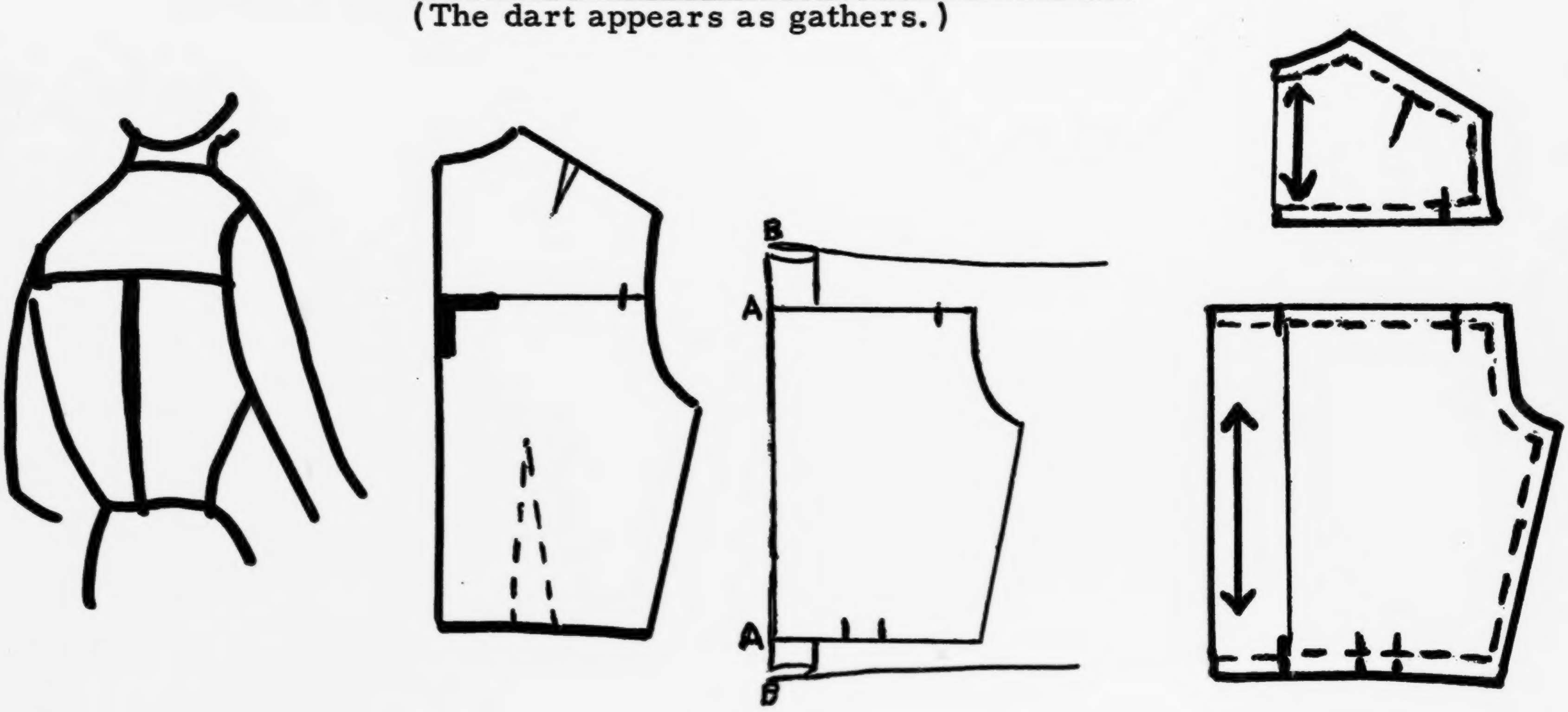


Fig. 147

1. Trace back bodice sloper and swing one-half of waist dart to form shoulder dart.
2. Determine style line for yoke. Square a line from center-back to armhole.
3. Crossmark position for matching yoke to lower bodice one inch from armhole.
4. Trace yoke section.
    a. Close shoulder dart to form smooth yoke.
    b. Add notches, seam allowance, and grainline.
5. To form inverted pleat, draw a vertical line on a fresh piece of paper the length of the lower back bodice (line AA).
    a. Draw a parallel line 2 inches away from line (A) (line BB).
    b. This inverted pleat will have a one-inch underlay (one inch underlay uses two inches of material).
    c. To form pleat, fold paper on line (B) to meet line (A). This will form half of the inverted pleat, which will be in the center-back of the bodice.
6. Trace lower section of back-bodice draft.
    a. Place center-back of lower section on line (A), keeping the inverted pleat folded.
    b. Trace lower section of draft over the rest of the paper, keeping pleat folded.

c. Open pleat. This forms your pattern before adding seam allowances.

d. Complete pattern--notches, grain, seam allowance, etc.

Example B. Bodice Back with shaped yoke and box pleat
This bodice back is styled so that the box pleat is joined to the straight edge of the yoke.

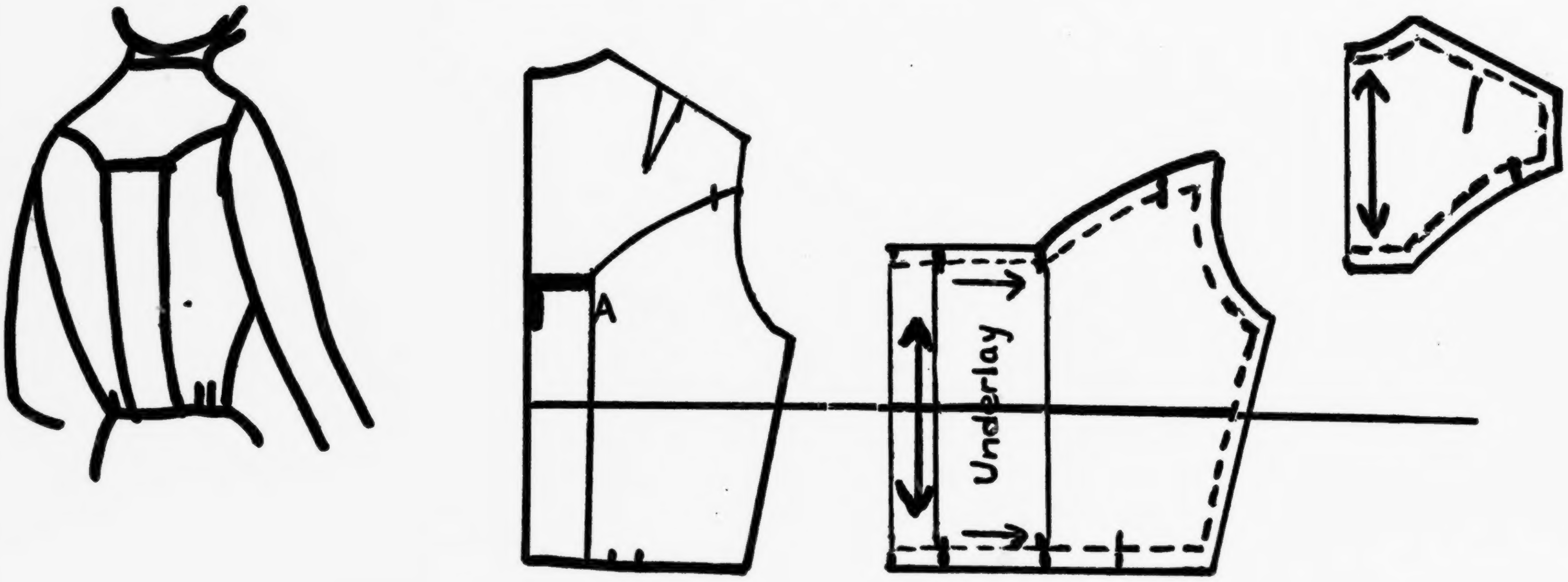


Fig. 148

1. Trace back bodice sloper and swing half of waist dart to shoulder dart. (The remaining half of waist dart will be eased into waistline seam.)
2. Draw in style line for yoke. Square a line two inches from center-back. Connect to armhole with a smooth curve.
3. Crossmark position for matching yoke to lower bodice one inch from armhole.
4. Trace yoke section.
    a. Close shoulder dart. Smooth shoulder seam.
    b. Add seam allowance, notches, and grain.
5. Trace lower section.
    a. Draw in parallel line for pleat 2 inches from center-back (line A).
    b. Square a horizontal line across the lower section.
    c. Slash vertical line on bodice.
    d. Draw a horizontal line on fresh piece of paper.
    e. Pin horizontal line of slashed pieces to horizontal line on paper.
    f. Leave 4 inches between sections 1 and 2. This 4 inches will be the fabric needed to make one-half of the box pleat.
    g. Fold pleat on line (A), bringing paper for underlay to the center-back.
    h. Complete pattern-- seam allowance, notches, grain.

ASSIGNMENT:

1. Duplicate patterns A and B.
2. Duplicate patterns A and B using difference-size pleats.
3. Design three back bodices using yokes.

Lower, Wider Necklines

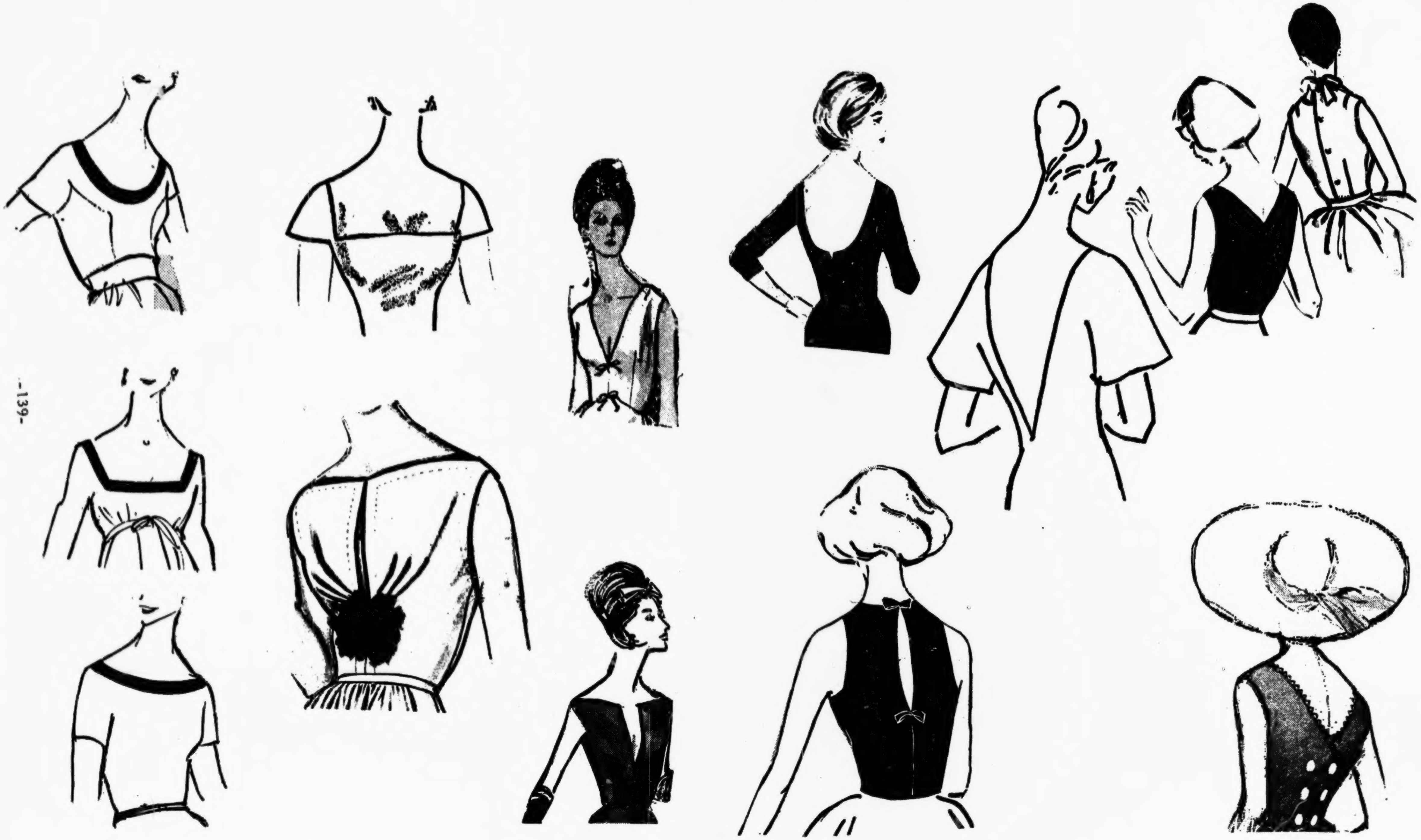


Fig. 150A

UNIT IV - NECKLINES

A. Introduction to Necklines • Lesson 1

OBJECTIVE: To become familiar with the importance of a pleasing neckline in a design.

RELATED INFORMATION:

Since the neckline attracts attention to the face, it is the focal point of most garments. For this reason the neckline must fit perfectly and be constructed expertly. If the neckline of a dress is flattering, a woman will buy the dress. But if the neckline is difficult to wear, even though the body lines of the dress may be pleasing, the fabric, color, and the price right, the dress will not sell in volume. One of the most difficult tasks in creating clothes is devising a new neckline.

The height, width, or shapely details in necklines help to make garments sell. Many women are more concerned with the becomingness of the neckline than with the overall line of the garment. All they see is the neckline in clothes they buy!

The neckline may be straight, curved, or diagonal, or it can be severely straight or a wavy line produced by a ruffle or circular segment. Collarless necklines may be classified as square, circular, or triangular.

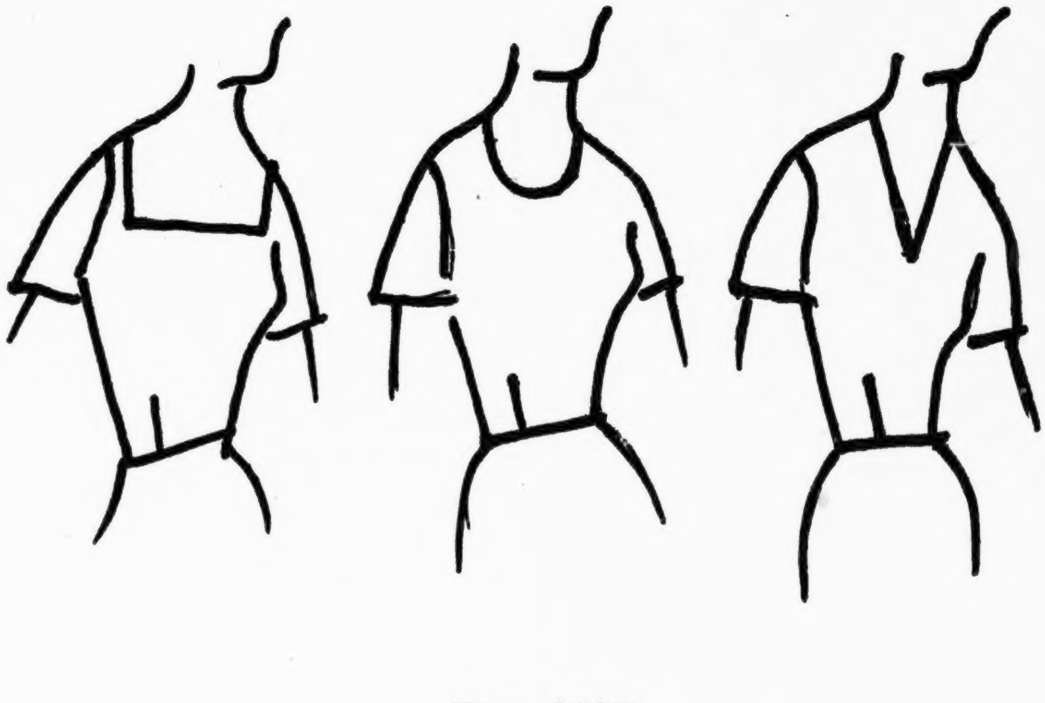


Fig. 150B

Like elementary forms, necklines become more interesting when they resemble the oval, the slim triangle and the rectangle. Just how high or low necklines are in a season is an important fashionpoint. When fashion dictates "high necklines," then the basic slopers are brought up high, near the chin. Variations of this neckline can be soft and feminine or severe.

ASSIGNMENT:

1. Classify the following necklines:

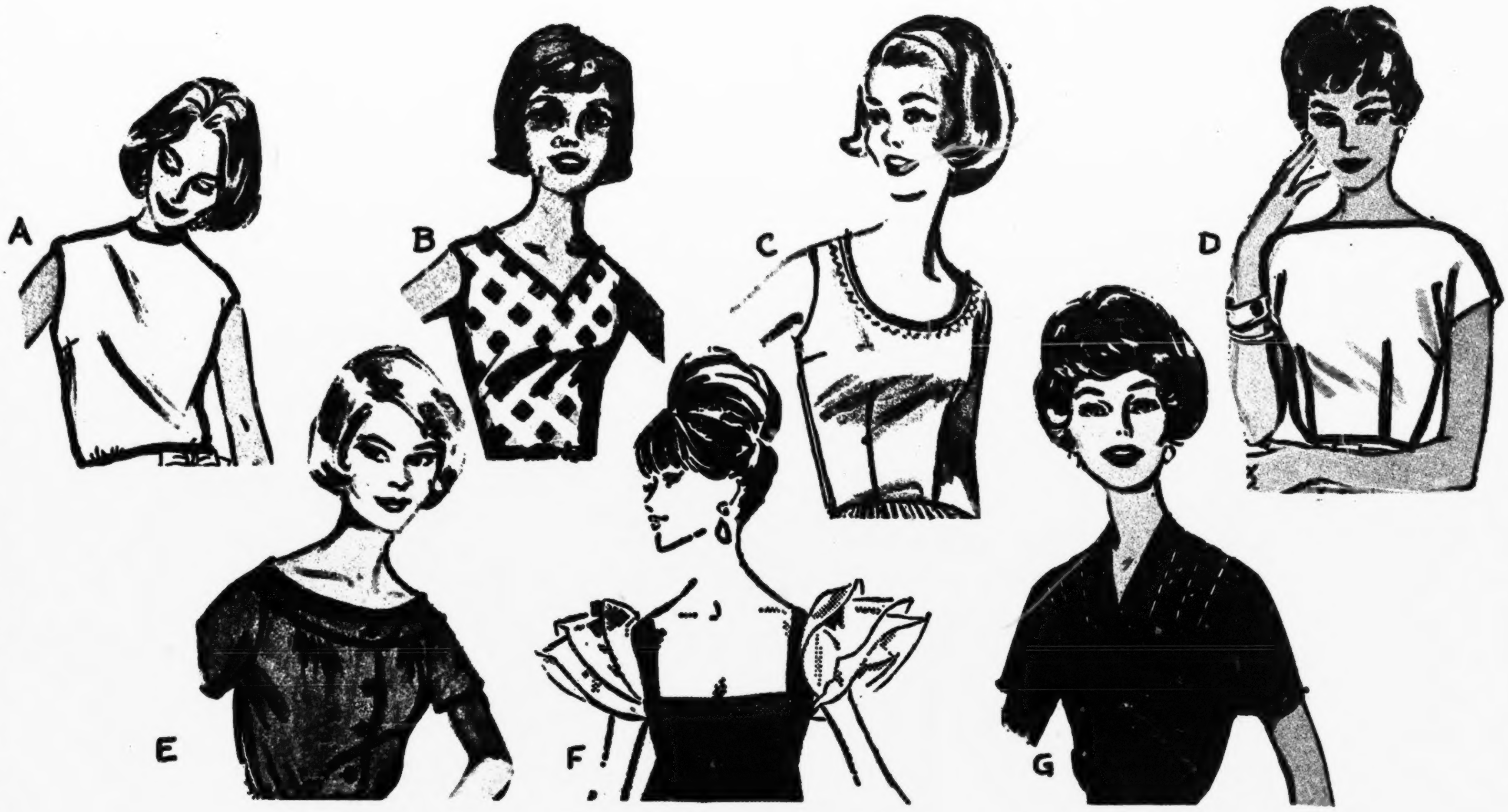


Fig. 151

2. Collect six sketches illustrating various necklines.

UNIT IV - NECKLINES

B. Types of Necklines

Necklines Using Formal Balance

Lesson 2

OBJECTIVES: To learn how to change the sloper neckline into necklines using formal balance.
To become familiar with the standard collarless necklines.

RELATED INFORMATION:

The face, the center of interest, can be enhanced by a perfectly shaped collarless neckline. The collarless necklines using formal balance are: (a) square neck, (b) round neck, (c) V neck. Within these necklines there are variations, such as the oval and boat necklines. All of these necklines are exactly the same on both sides of the center front. The basic neckline, which is $\frac{5}{8}$ inch lower than the sloper neckline, has always been a popular background for jewelry.

In designing garments, the direction of the neckline must be considered. A neckline that is deeper than it is wide lends height; wider than deep lends width. Broad necklines are best worn by women with good-looking neck and shoulders. Square necklines need good curves in the lines to harmonize with the body curves. Deep ovals, the "sweetheart" neckline, and deep, curved V's flatter most women.

The collarless neckline may be low or high. In making the pattern for a neckline, both front and back must be considered. In general, when the front neckline is low, the back neckline is high.

The bateau neckline (from the French word for boat) is wide across the throat, boat-shaped. It is high in front. The crew neckline found in sweaters and certain Jersey frocks is straight and high around the throat.

The cardigan neckline may be either round or V, but buttons down the front.

In the following instructions we will cover changing the basic neckline to popular necklines using formal balance.

PROCEDURE:

Example A. The oval neckline, or variations of the round

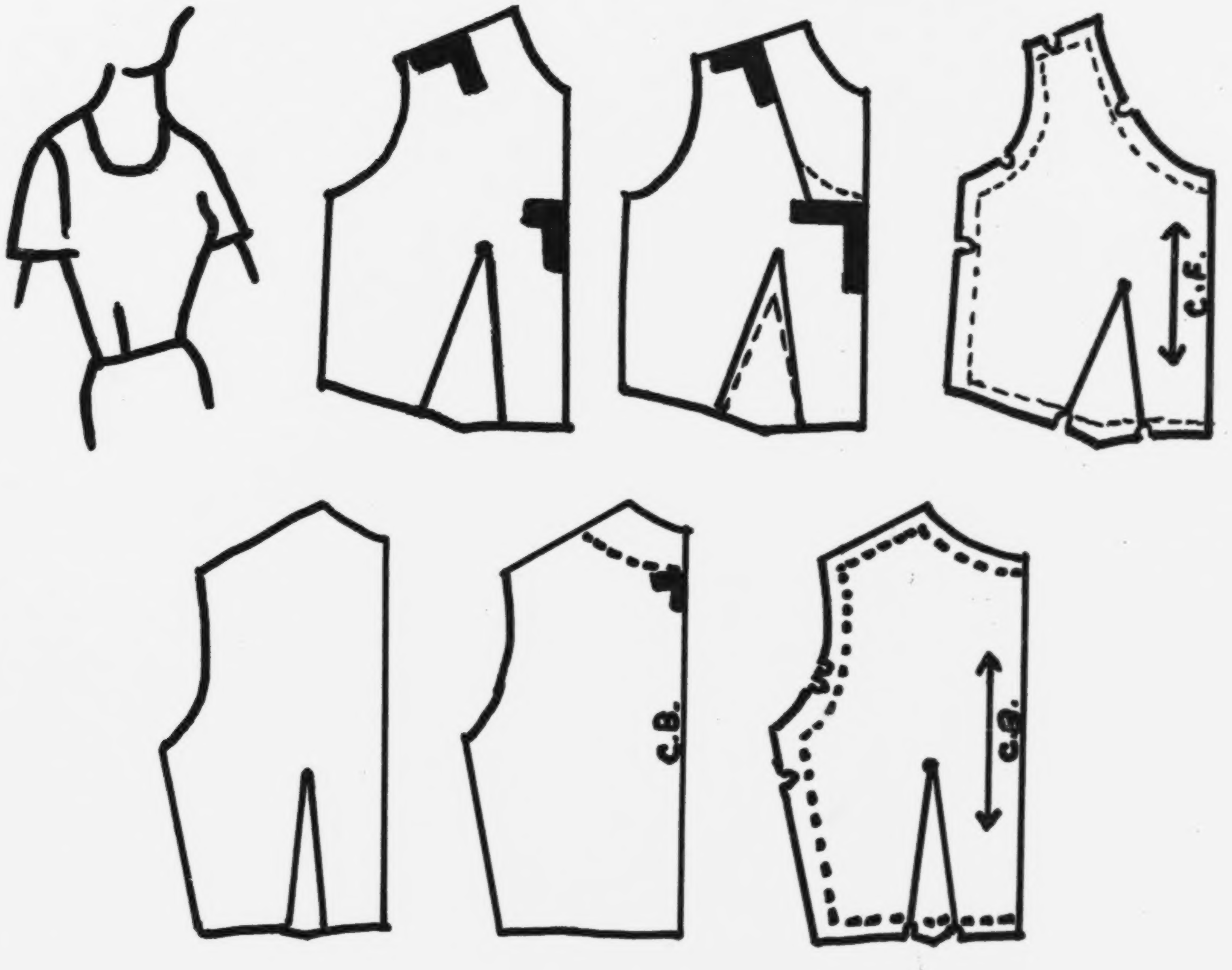


Fig. 152

1. Trace the front and back bodice slopers.
2. Decide the amount of drop at the center front. Mark on draft.
3. Decide the style at the front shoulder. Mark on draft by squaring a line from shoulder.
4. The back shoulder must correspond to the front. Mark the style line along the shoulder of the back bodice the same distance from the neckline as on the bodice front.

5. On the front bodice, square lines at the shoulder and center-front from the ends of the new style line. Allow these lines to cross. These are the guide lines for your new curve.
6. On the back bodice, square a line $\frac{1}{4}$ inch in length from center back at the low point of the drop.
7. Draw the curve of the new style line on front and back bodice drafts. Use any instrument that will give you the curve you want. This line can be drawn freehand and then a curve used to true the line.
8. Trace the complete pattern on a fresh piece of paper.
9. Add seam allowance, grain, and notches.

The square neckline is constructed in the same way. A slight incline of the style line from the shoulder to the horizontal line produces a better fit for the square neckline than an exact perpendicular to it.

The scalloped neckline may be constructed in the same way, too. Scallops are traced instead of the curved line. Any shaped line may be substituted for the oval curved line. Whenever drawing a curved line, square off a short distance at the center front or back to prevent a point's forming at the center of the curve when the fabric is opened.

Example B. The V neckline

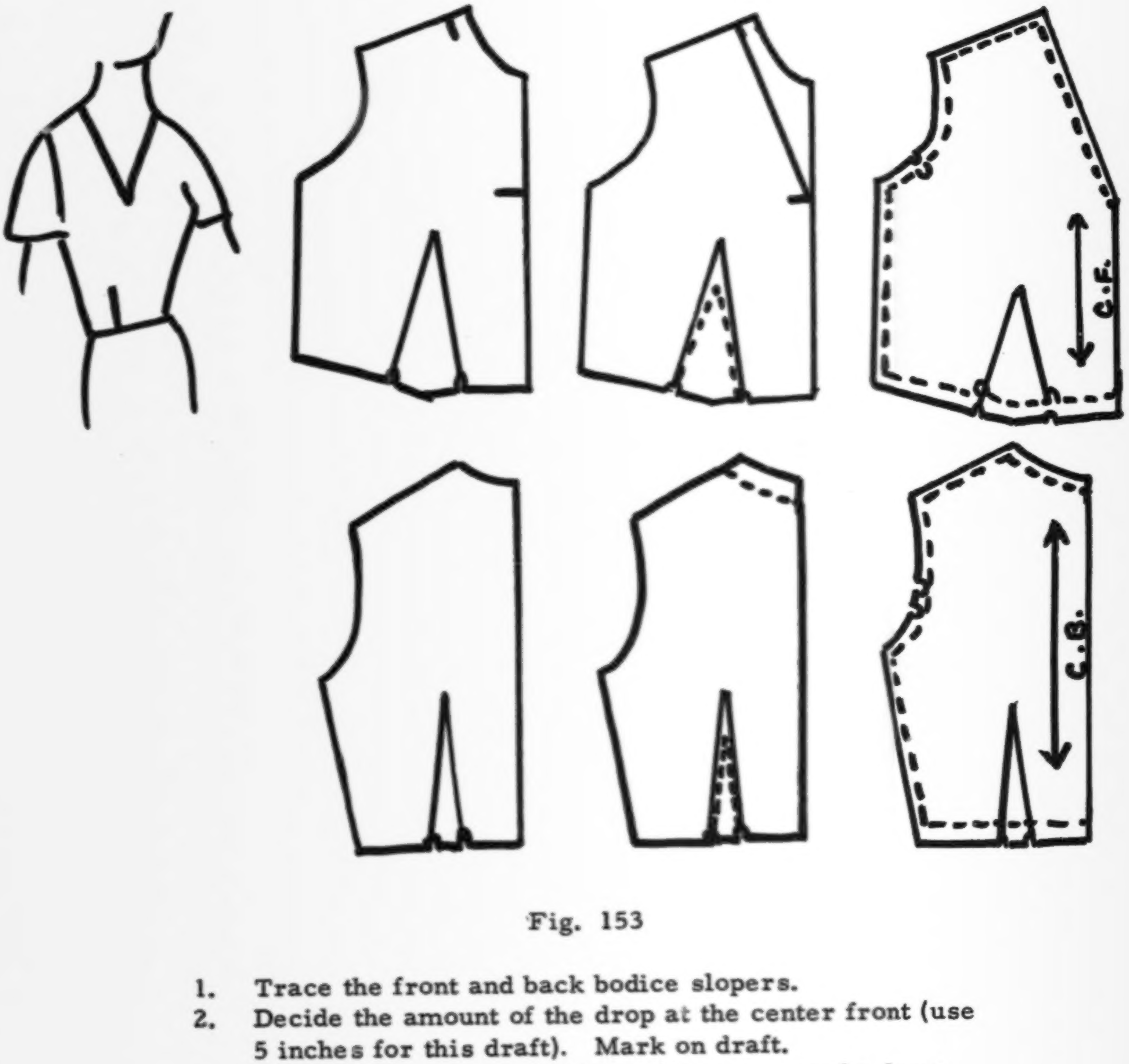


Fig. 153

1. Trace the front and back bodice slopers.
2. Decide the amount of the drop at the center front (use 5 inches for this draft). Mark on draft.
3. Decide where the style line will appear on the front shoulder. Mark on draft.
4. Draw a straight line from the dropped center front to the point of drop on the shoulder.
5. Mark the style line on back shoulder the same distance from neckline as the front shoulder style line.
6. Draw in the back style line.
7. Trace the complete pattern on a fresh piece of paper.
8. Add seam allowance, grain, and notches.

ASSIGNMENT:

1. Duplicate patterns A and B.
2. Develop four patterns of other shapes at the neckline.
3. Trace figure below and sketch in boat neckline, crew neckline, cardigan and sweetheart necklines.

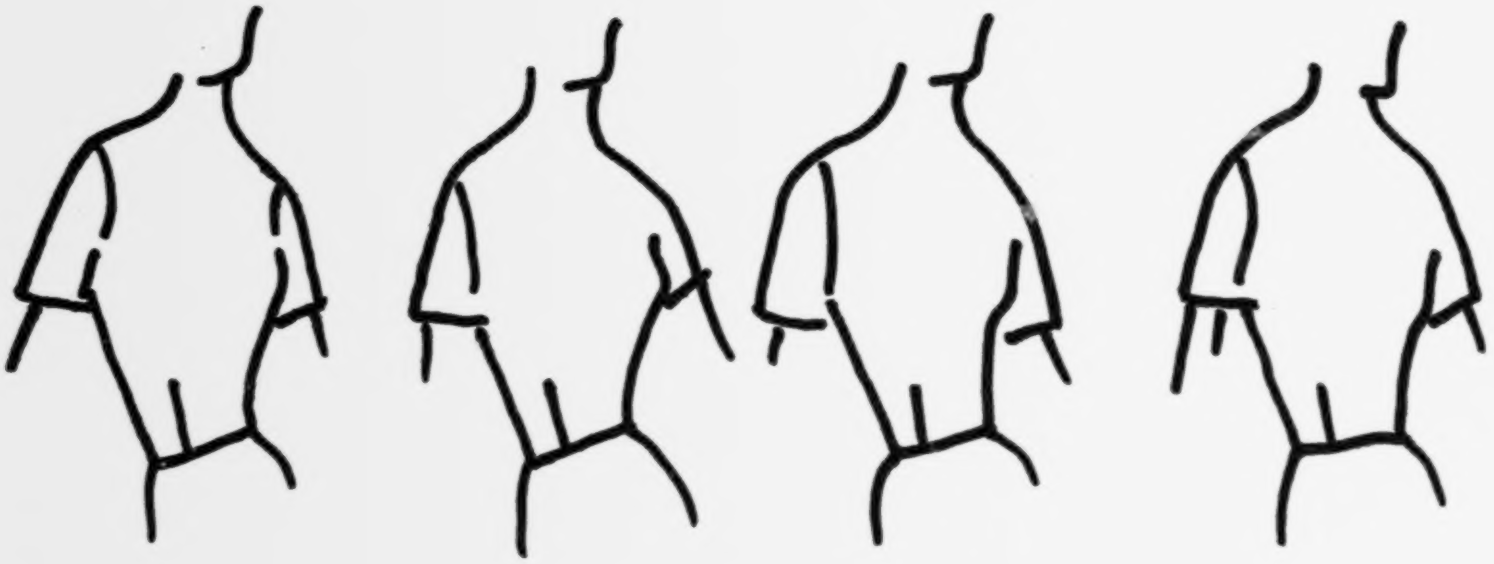


Fig. 154

UNIT IV - NECKLINES

B. Types of Necklines
Asymmetrical Necklines

Lesson 3

OBJECTIVES: To become familiar with the one-sided neckline.
To learn to style asymmetrical necklines.

RELATED INFORMATION:

All of the necklines covered in the previous lesson were exactly the same on both sides. This is called formal balance. Informal balance or asymmetry in the necklines means that the shape is different on each side of the neck. The beauty of asymmetry is in its exaggerated and original style lines. These necklines add interest and a note of sophistication to many designs.

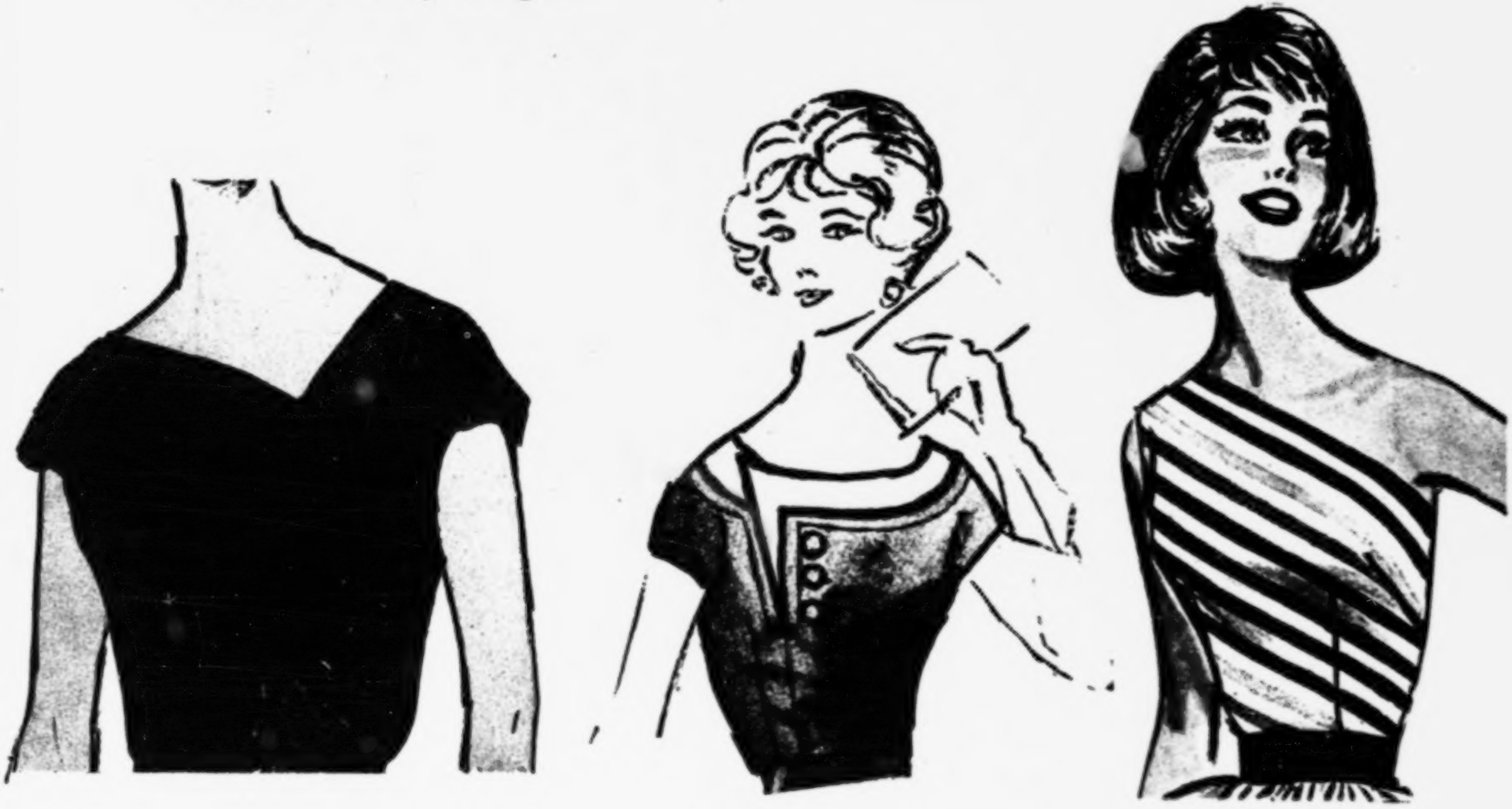


Fig. 155

In the designing of asymmetrical necklines, it is important to work with a complete bodice, front and back. To do this, place the center-front or center-back on a fold of paper and trace the bodice sloper.

PROCEDURE:

Example A. Neckline with one-sided V

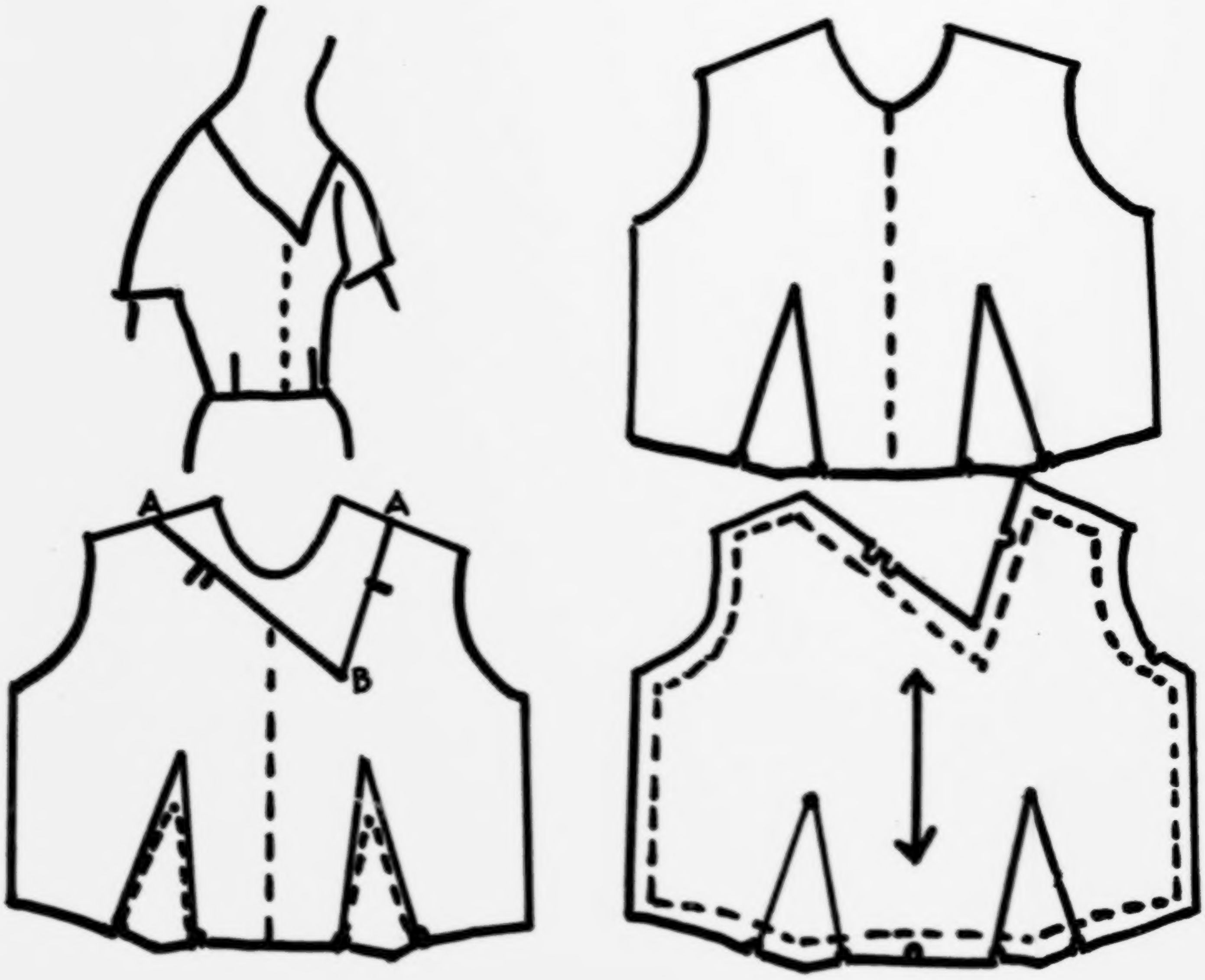


Fig. 156

1. Trace the entire bodice front.
2. Determine style line or drop at shoulder point. This is generally the same on both sides. Mark this position (A).
3. Determine the position and amount of the drop of the style line for neckline. Mark the position (B).
4. Draw in style line, connecting points (A) and (B).
5. Trace draft with new neckline on a clean piece of paper.
6. Complete pattern by adding seam allowance, grain, and notches.

ASSIGNMENT:

1. Duplicate Example (A).

2. Design an asymmetrical neckline and:
   a. draw neckline on front-bodice sketch.
   b. develop complete pattern for this design.

3. Make patterns for two of the following sketches.

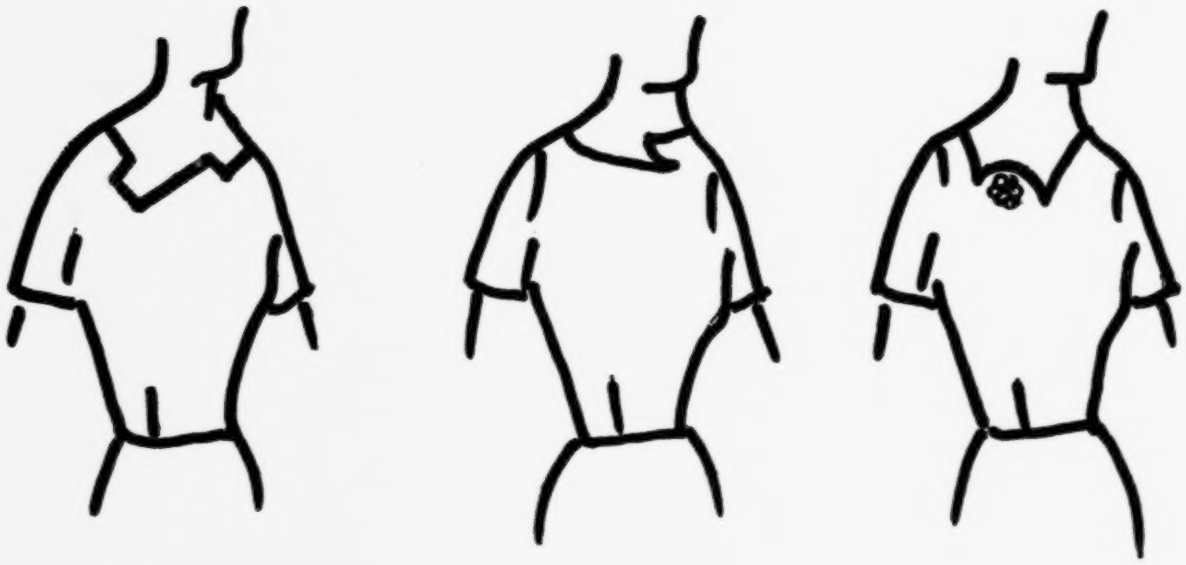


Fig. 157

THE COWL NECKLINE

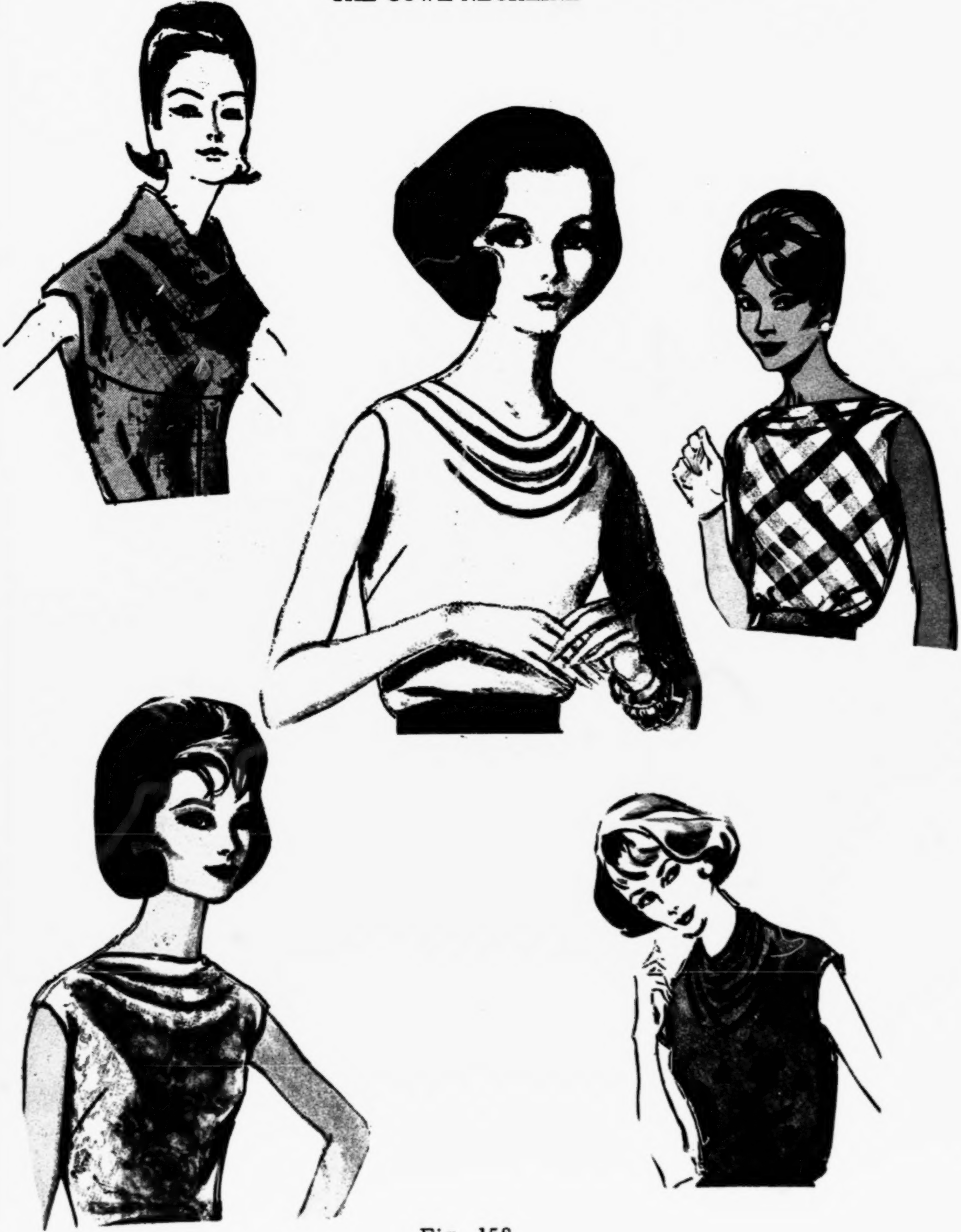


Fig. 158

UNIT IV - NECKLINES

B. Types of Necklines

Draped Necklines - The Cowl

Lesson 4

OBJECTIVES: To learn how to add fullness or draping at the neckline. To become familiar with the types of garments and fabrics that use the cowl.

RELATED INFORMATION:

The cowl neck refers to soft folds around the neck, either at the base of the neck or falling lower on the figure, directed toward the center front or center back. (See Fig. 158.)

The modern cowl neckline may be recognized as having been inspired from the clothing worn by the early Greeks. Their clothing was not cut and shaped to the body, but their garments were merely several large pieces of cloth draped about the body. They were masters in the art of draping and created beautiful garments through this method.

This classic drapery, with its fluid, stately lines, has inspired designers through the centuries to the present day. There is a certain dignity and statuesque quality to drapery that makes a distinguished evening dress or late-day dress.

The cowl neckline is best suited to fabric that will fall into soft folds, like velvet, chiffon, jersey, crepe and satin. As fabric drapes more easily on the bias, the cowl bodice is usually cut on the true bias of the fabric.

PROCEDURE:

Example A. Forming a cowl using center-front and waistline dart

1. Using sloper with waist dart, trace and swing one-half of the dart to the center-front position.
2. Draw a line from center-front bust dart, extending the center-front from (A) to (B).
3. Square a line from center-front (B) to the shoulder at (C).
4. This process adds the amount of fabric needed for this simple drape. (The bulk of the fabric falls into soft folds.)
5. The distance from (B) to (C) determines the depth of the new neckline.

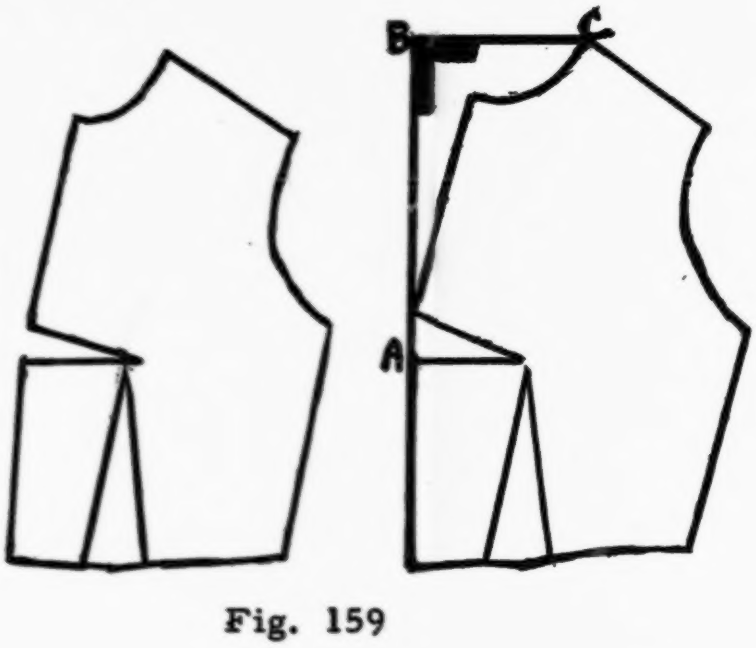


Fig. 159

(As fabric drapes more easily on the bias, the cowl bodice is usually cut on the bias. In making complete pattern, you will need enough paper for a complete front - both right and left sides - and the facing.)

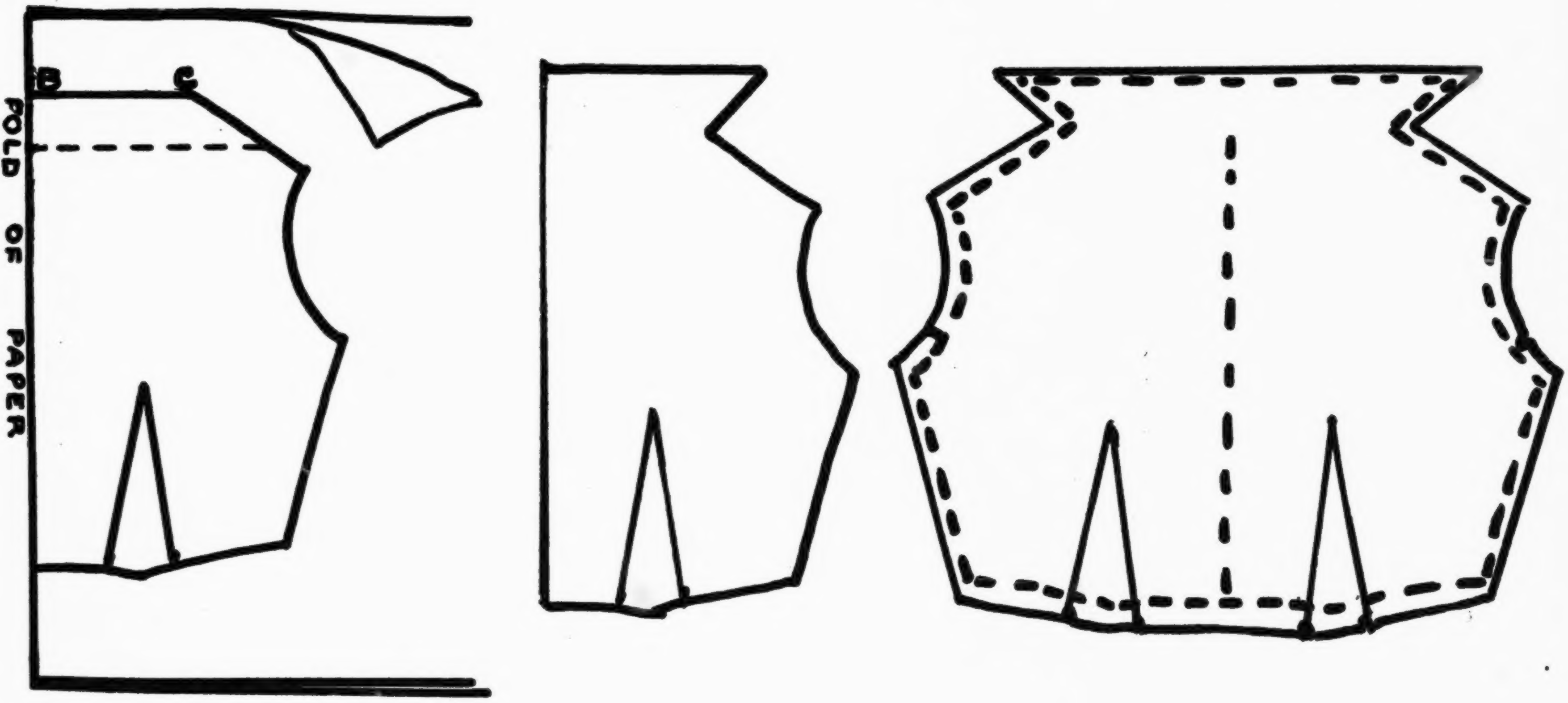


Fig. 160

6. Trace the draft to one side of a fresh sheet of paper, with all the new style lines. (Be sure the paper is twice the width of the bodice, plus allowance for facing and seams.)
7. To form facing for cowl (it can be 1 to $1\frac{1}{2}$ inches deep, measure down desired width from new neckline (B-C).
8. Fold the paper at the neckline. Trace the facing line (broken line on the diagram) and the necessary section of the center-front line and shoulder seam. When open it will look like the center portion of Fig. 160.
9. Fold the paper along the center-front fold of the pattern and trace the entire front pattern. Add seam allowance and notches. When opened it will look like the right-hand sketch in Fig. 160.

Instructions for marking the grainline follow

Before a pattern is used for cutting a garment, it is important to establish the grainline. In the cowl-draped front, the center-front will be cut on a true bias. There are two methods for making grain indicators on any pattern piece that will be cut on the bias.

I. Method using a triangle

1. Place the triangle against the center-front line with the base of the triangle directly over the center-front line.
2. Using the two legs of the triangle, draw lines along them to indicate the grain.
3. The center-front line should now be a true bias.

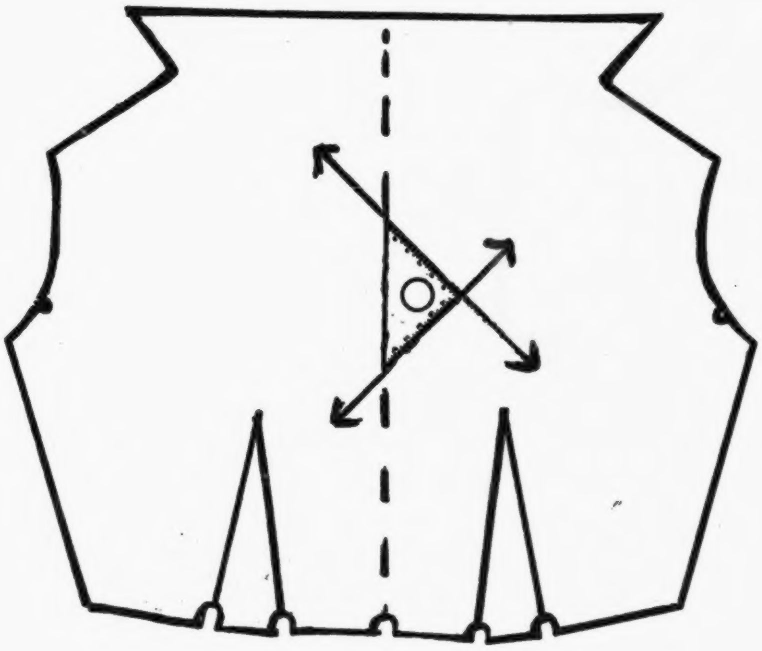


Fig. 161

II. Method using a square or ruler

Note: If a triangle is not available, a ruler or square will also work.

1. Selecting a point on center-front, measure 4 inches along it, and crossmark (A).
2. Square a line 4 inches in length from the original point on center-front (B).
3. Connect (A) and (B). This will be the grainline of the fabric.

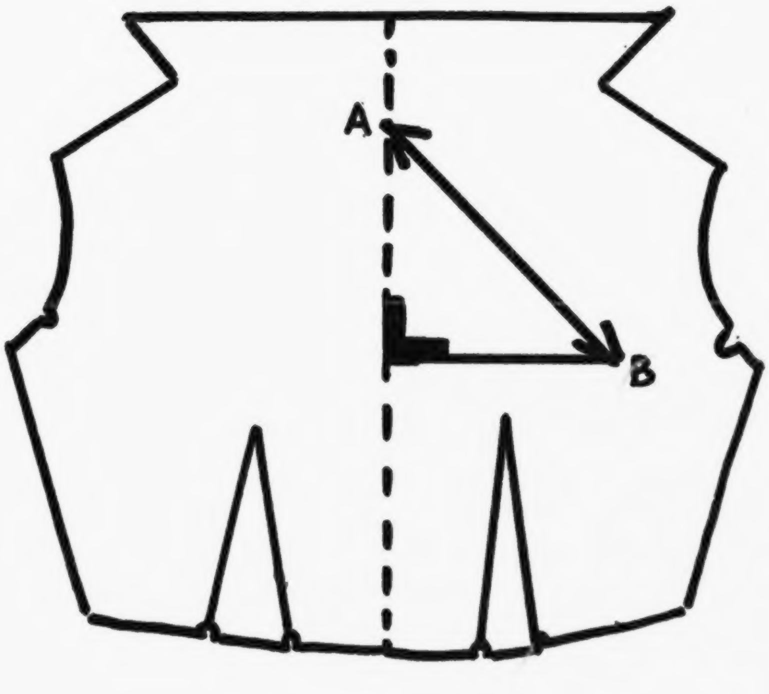


Fig. 162

Example B. Using the slash-and-spread method for developing a cowl

The amount of drape in the cowl neckline can be controlled by the amount of slashing and spreading that is done, using the original front bodice. In making a cowl with several drapes and a fitted bodice at the waist, follow these instructions very carefully:

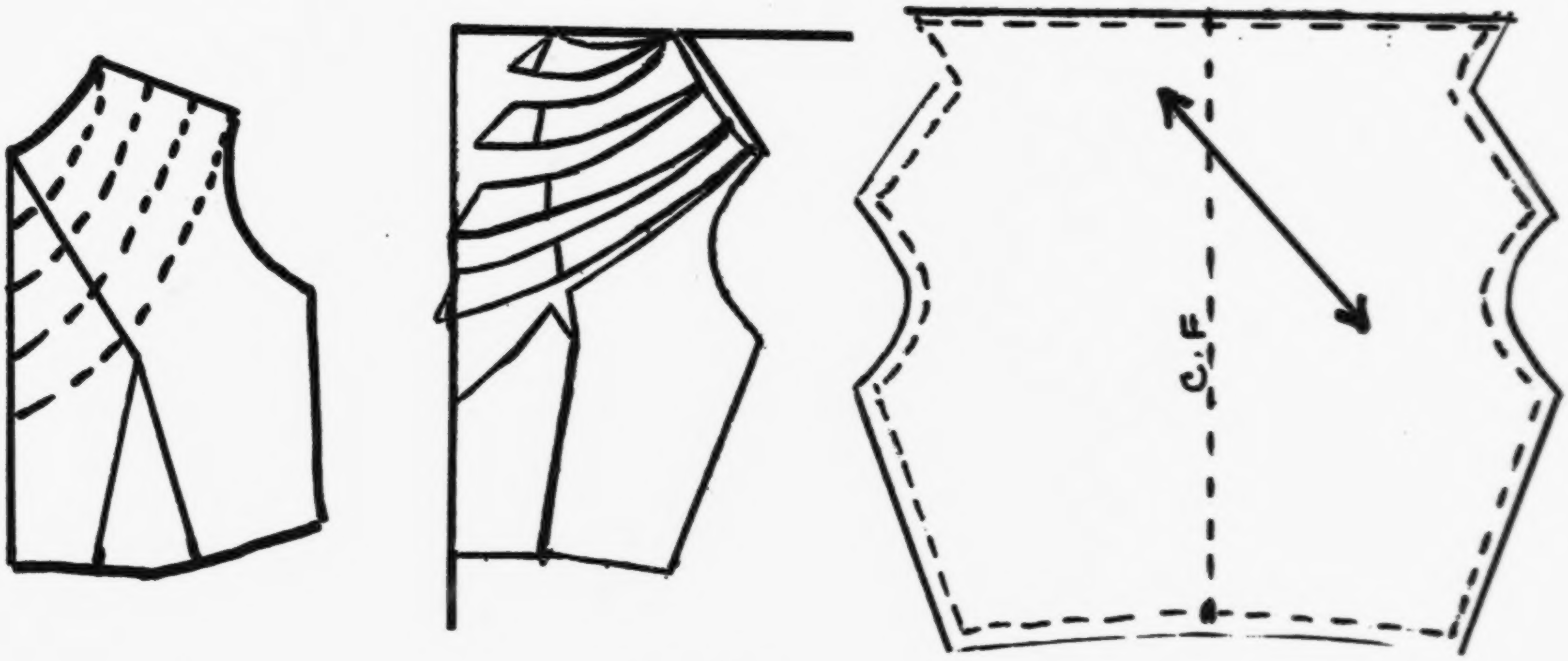


Fig. 163

1. Trace basic sloper with waistline dart.
2. Draw slash lines for positions of drapes, that is, folds.
3. Draw a line from center-front at neck to pivoting point of dart.
4. Draw a squared line on a new piece of paper (see Fig. 163).
5. Slash on the guide lines from center-front to shoulder. (Do not cut apart at shoulder.)
6. Slash dart and remainder of line in #3 above.
7. Place pattern on new paper, with lower part of center-front along the vertical line, and the shoulder-neckline point at the horizontal line. Close dart. Spread each of the slashed lines twice the depth of the fold in mind. Pin or Scotch tape to pattern paper.
8. Straighten shoulder line.
9. Complete pattern: add seam allowance, notches, grain.

ASSIGNMENT:

1. Develop patterns for examples A and B.
2. Mark grain indicators so front will be cut on the true bias.
3. Develop complete patterns for the following cowl necklines.

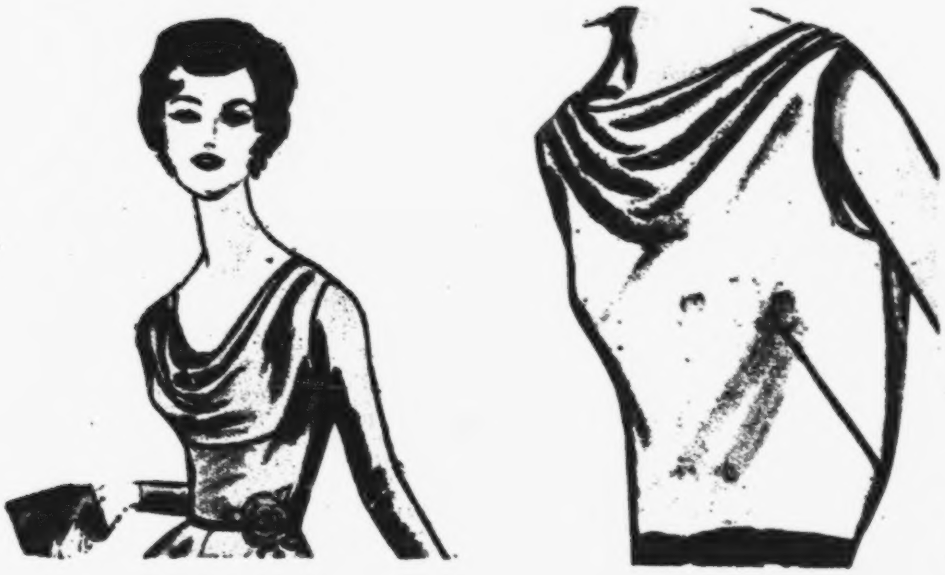


Fig. 164

UNIT IV - NECKLINES

C. Neckline Facings and Interfacings — Lesson 5

OBJECTIVES: To learn how to make facing and interfacing patterns for necklines.
To become familiar with the different types of interfacings.

RELATED INFORMATION:

Most collarless necklines require a facing - except for the neckline with fullness, which is usually finished with French piping. The shaped facing is the best finish for a collarless neckline. The facing is used to finish off the neckline edge and to give additional body to this edge so that it will lie flat against the body. The shape of the edge and the width of the facing depend upon the style of the garment and the texture of the fabric. The secret of a good facing is to make it an exact reproduction of the part to be faced, not only in shape but especially in grain. The facing is usually cut 2 to 2½ inches in width. These measurements may be changed to fit more economically into the marker.

For decorative purposes, facings may be cut in a contrasting color or design. This type of a facing is usually stitched to the wrong side and turned to the right side for the finished garment.

In industry, separate patterns are made for the facing and for the interfacing. The interfacing is placed between the facing and the garment to stiffen or to give additional body. Interfacing is a "must" with some designs. In the designing of clothes it is important to consider whether their appearance would be improved by the addition of interfacing at certain points. The facing is usually cut of the same fabric as the garment, while the interfacing can be one of the many woven or non-woven fabrics on the market today. Since several interfacings could be used with a given fabric, in selecting the particular fabric to be used for the interfacing, it is important to consider the amount of stiffness or softness desired.

PROCEDURE:

Example A. Making the facing pattern for a collarless neckline

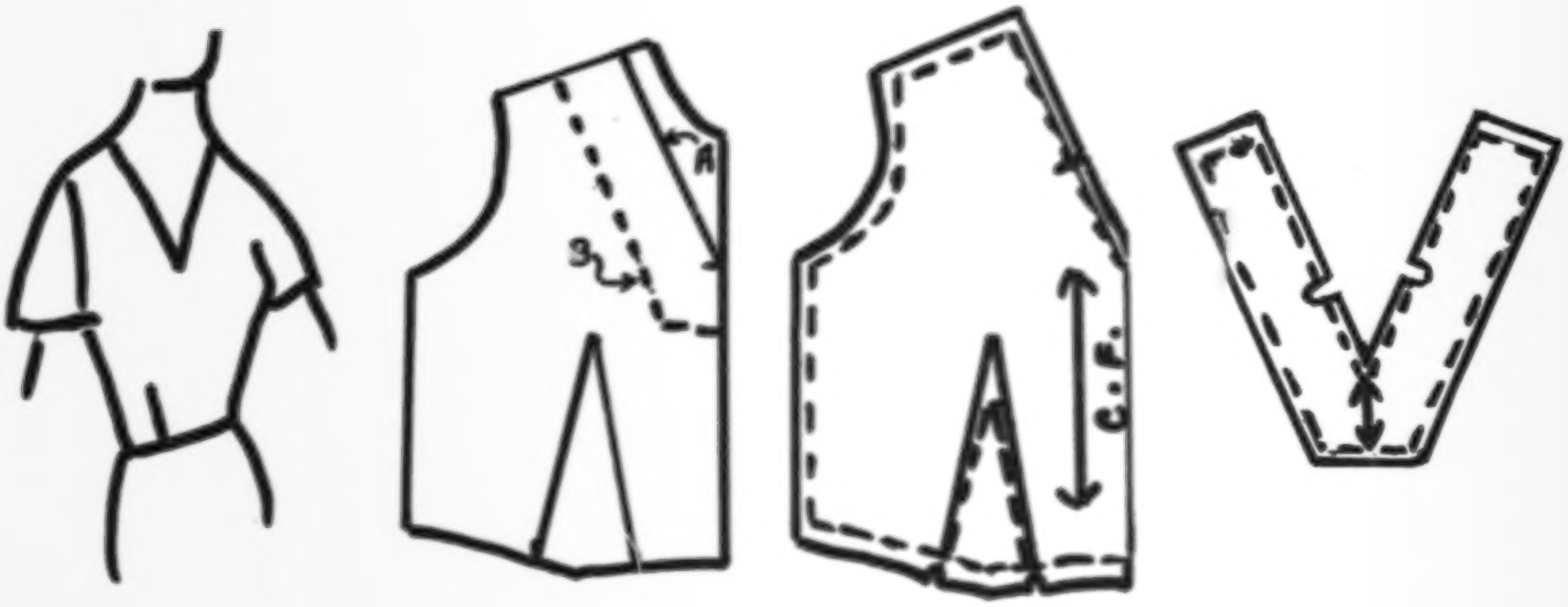


Fig. 165

1. After the neckline edge has been formed on the draft (A), measure in from the neck edge, in a number of places along the neckline, the width of the facing to be used (B). (In this case use 2 inches plus $\frac{1}{4}$ inch for the turnback needed to finish the facing edge.)
2. Do this along both the back and front necklines.
3. Connect all measuring points with a smooth line.
4. Mark the grainline. This is in the same direction as that of the bodice.
5. Mark notches at neckline.
6. Trace the complete facing on another piece of paper.
7. Add seam allowance ($\frac{1}{4}$ inch at neckline and $\frac{3}{4}$ inch at shoulder.

Example B. Making the interfacing pattern

The interfacing is usually narrower than the facing so that it is completely covered by the facing. The seam allowances are also smaller; this helps to eliminate the added bulk created by the interfacing at seamline and neck edge. This also eliminates the need for trimming any excess material.

1. Follow the steps for facing (A), up to number 6.
2. In adding seam allowance, only $\frac{1}{16}$ inch is needed at the neck edge, but the regular allowance is used at the shoulder edge.

ASSIGNMENT:

1. Make patterns for facings in Examples A and B in Lesson 2, and Example A in Lesson 3.

2. Collect samples of the following types of interfacings: lawn, organdy, muslin, hair-canvas (Armo), Hymo, pellon, interlon, and formite. List their fiber content and where you think they can be used to best advantage, i. e., with what fabrics and styles.

UNIT V - CLOSINGS AND EXTENSIONS

A. Amount Required for Buttonholes and Extensions Lesson 1

OBJECTIVES: To learn to determine how much fabric is needed for extensions.
To learn how to plan and mark buttonholes on the pattern.

RELATED INFORMATION:

The standard traditional closing is right over left in both the front and back in women's clothes. The buttons may be down the center, to one side, or double breasted. In dress designing, you may find left lapping over right either because it lends an element of the unexpected or because other details require it for balance, rhythm, or proportion. Some unusual closings employ a lap in one direction above and in the other direction below.

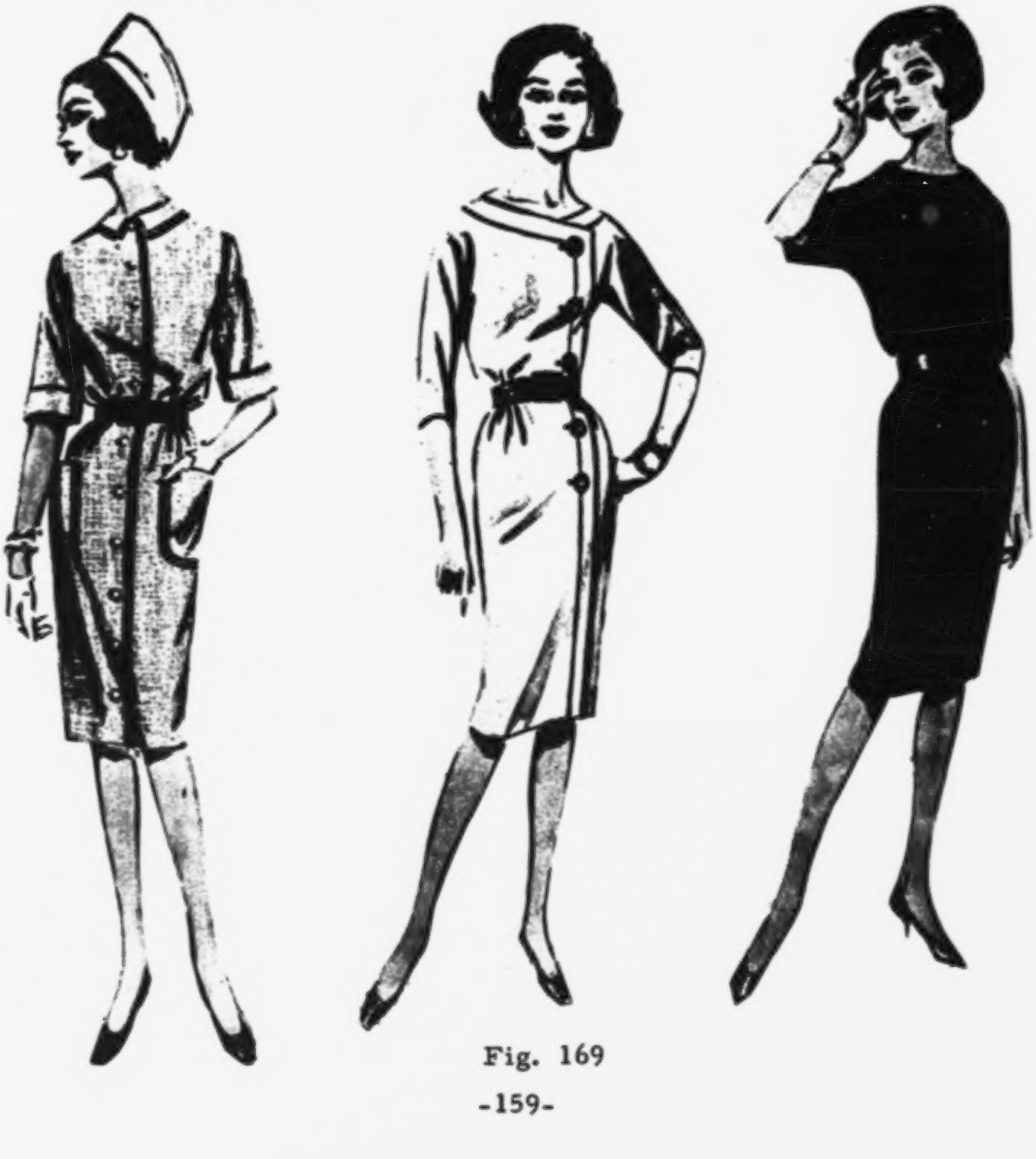


Fig. 169

No matter where buttons are placed, the principle is the same for planning the extension and marking the buttonholes. When a garment has been designed with a closing, the button or fastening is usually selected before the duplicate dress will be made. The size of the button is most important in planning the amount of extension to use.

For any garment that buttons to the neck, the center-front of the neckline may be lowered (and usually is) $\frac{1}{4}$ inch to $\frac{3}{8}$ inch to provide more ease at the neck. This change must be made on the draft before planning any extensions of facings.

PROCEDURE:

Example A. Estimating length of the buttonhole

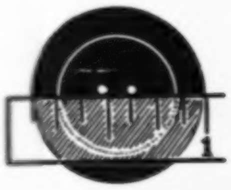


Fig. 170

1. Measure the diameter of the button.
2. Add $\frac{1}{8}$ inch.
3. For ball, jeweled, or odd-shaped buttons it may be necessary to allow more than $\frac{1}{8}$ inch. To determine the size of buttonhole in such cases, cut a slit in the fabric and test.

Example B. Planning the placement of buttons and position of buttonholes

Buttonholes are placed on the right-hand section of the garment. They begin $\frac{1}{16}$ inch to $\frac{1}{8}$ inch to the left of the center-front marking and extend back to the right side of the center, having the distance from the center equal to the diameter of the button. The small allowance to the left is made for the shank of the button. If the button has a wide shank, measure the shank and extend buttonhole to the left of the center one-half the measurement of the shank.

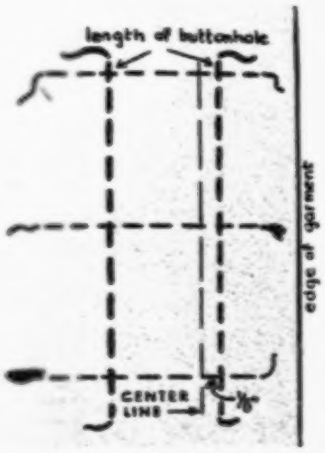


Fig. 171

Many times the buttonhole will be made by the operator. It is important to mark the final pattern with the placement of the buttonholes, so they can be transferred to the fabric as a guide for the operator. The buttonholes can be made using contrasting fabric, corded fabric, or - for design (as in stripes) - cut on the bias.

1. The space between neckline and the first buttonhole equals one-half the diameter of the button plus $\frac{1}{4}$ inch.
2. For marking of buttonholes above and below the waistline, space the buttonholes so that the belt or buckle is at least $1\frac{1}{2}$ inches away from the button.
3. After determining position of neckline and waistline button-

hole, divide the remaining space by the number of buttons desired. (If possible, place a buttonhole at bust level to prevent the garment from gapping.)

Example C. Determining the amount of the extension

If the garment is single breasted, the buttons are placed at the center of the garment. The button will extend half to the right and half to the left of the center. To take care of this, it is necessary to allow for an extension of the fabric of the garment. The rule for allowances for extension is: $\frac{1}{2}$ the diameter of the button plus at least $\frac{1}{4}$ inch, depending upon thickness of the fabric.

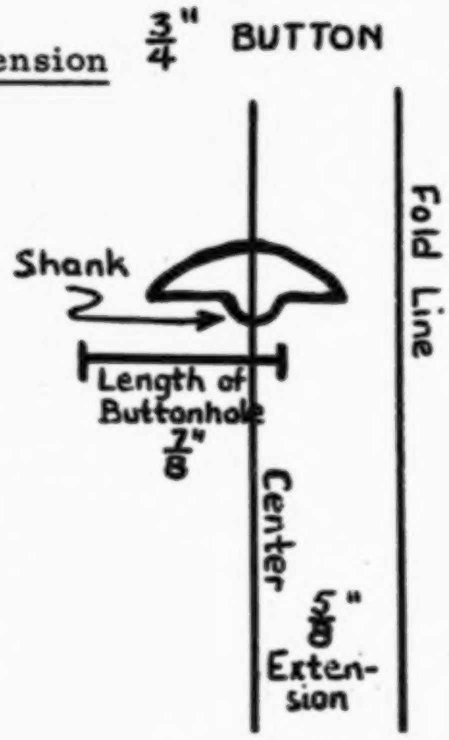


Fig. 172

1. Measure the diameter of the button, divide in half.
2. Add $\frac{1}{4}$ inch or more depending upon thickness of fabric.
3. This amount will be added to the left of the center-front as the garment is worn.

ASSIGNMENT:

1. Figure out the extension needed for the following buttons:

   a. /30 half-ball b. /24 flat S. S. c. /36 full-ball
   d. /18 two-hole e. /45 four-hole

2. Figure the size of the buttonholes for the buttons in Question 1.

3. Figure the spaces between buttons (center-to-center) for the following lengths to be buttoned:

a.	Number of buttons	Length of opening
a.	9	12 inches
b.	7	$16\frac{1}{2}$ inches
c.	8	14 inches
d.	14	$34\frac{1}{8}$ inches
e.	4	$10\frac{1}{2}$ inches

4. Collect six different buttons, varying in size, style, or material.

UNIT V - CLOSINGS AND EXTENSIONS

B. Types of Closings Lesson 2

OBJECTIVES: To become familiar with the different types of closings.

To learn how to change the style line of the basic bodice sloper for the different types of closings.

RELATED INFORMATION:

Most clothing requires some means of opening and closing, plus a fastening to make it easy to get into and out of the garment, especially if it is fitted. The design may be single breasted, double breasted, or asymmetrical, commonly called a surplice. A necessity such as the closing can also be decorative, and most designers make a point of accenting it in some ingenious way. Throughout fashion there is an endless array of clever closings and fastenings used for these closings. The closing may be fastened with interesting or rare buttons, braid or frogs, ribbons or bows, tiny studs, or oversized hooks and eyes. To create interest, the edges for the closing may be shaped into scallops or similar units.

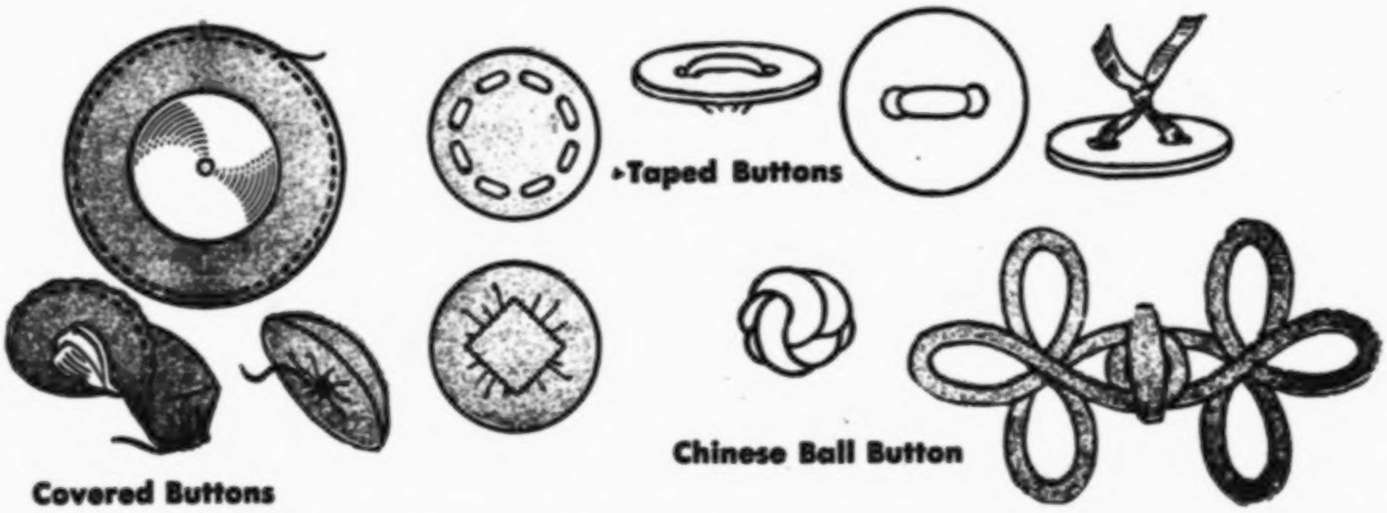


Fig. 173

An opening extension may be as long or as short as you wish it. It may be for a short distance below the neckline; stop at the waistline; continue a short distance below the waistline; or it may continue to the bottom of the dress. Or, it may appear merely in a yoke. No matter what length, the method of constructing the extension and facing remains the same.

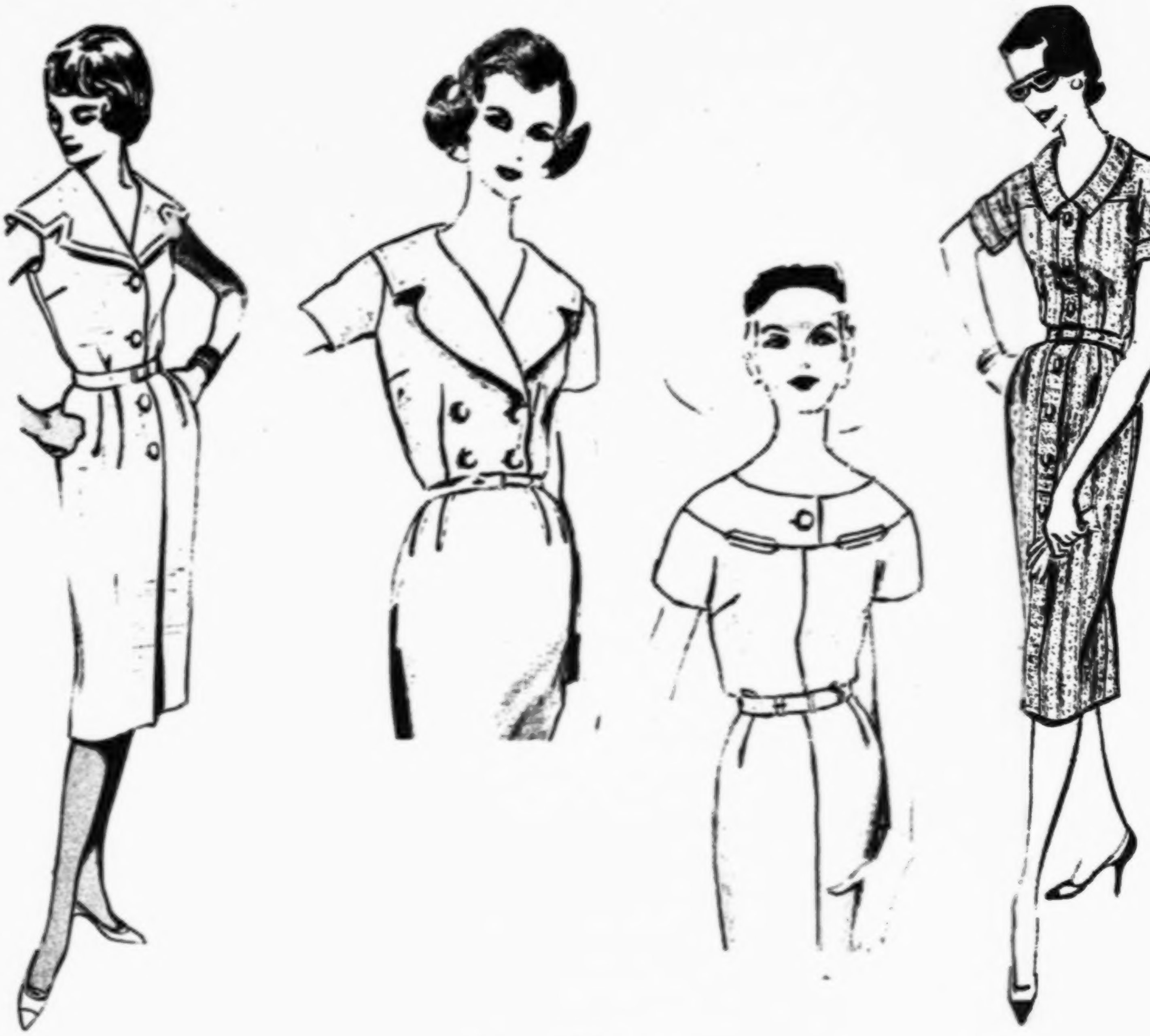


Fig. 174

The following examples will cover the planning of extensions and closings for the single breasted, double breasted, and surplice openings. Facings for these openings will be covered in the next lesson.

PROCEDURE:

Example A. Single breasted opening extension

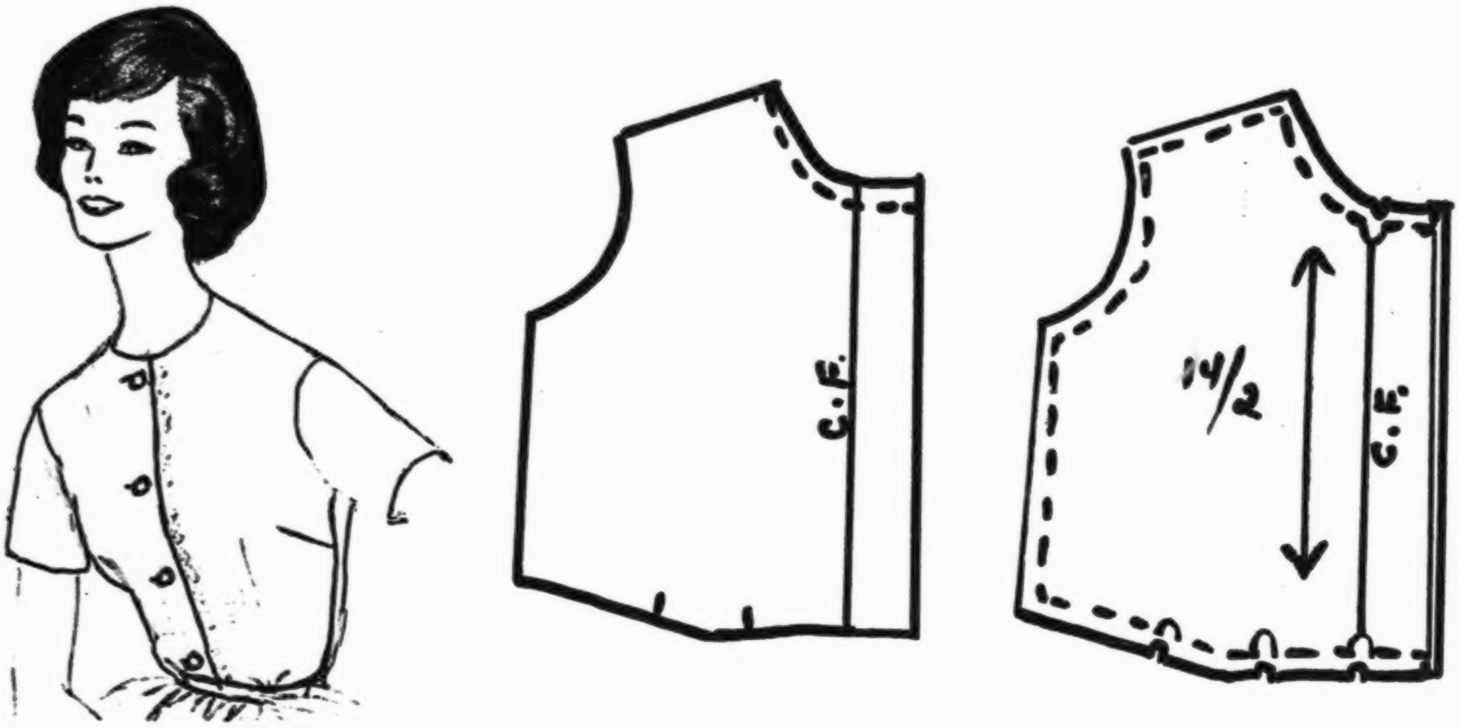


Fig. 175

1. Trace the front bodice sloper on pattern paper, leaving enough paper for any additions to be made (at least 6 inches).
2. Drop the neckline $\frac{1}{2}$ inch at the center-front only.
3. Draw a line parallel to the center-front and the width of the extension desired. This will be the fold-line of your front bodice. (Use $\frac{3}{4}$ inch for this extension.) Facings will be added in the next lesson.

Example B. Double breasted opening extension

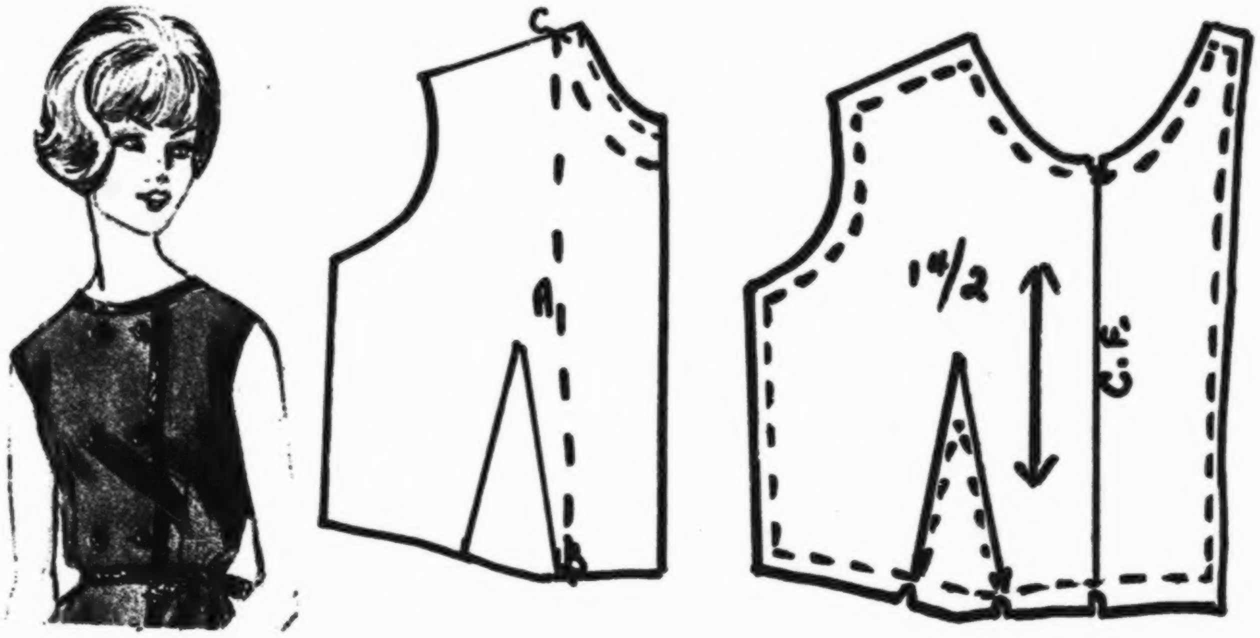


Fig. 176

1. Trace the front bodice sloper on pattern paper, leaving enough paper for any additions to be made.
2. Drop the neckline $\frac{1}{2}$ inch at the center-front only.
3. Working with the model form, plan the position of the style line (A):
   a. width of extension desired and position of the widest point.
   b. amount of overlap at waistline.
   c. style line for neckline.
4. Cross-mark this on your draft, working from center-front to the right of center as the garment will be worn.
5. Connect the crossmarks with a smooth line.
6. To reproduce style line of double-breasted front to the left of center-front, fold paper on center-front line and trace style line, including waistline, neckline, and shoulder if necessary.
7. Unfold the paper and draw in the lines which form the extension.
8. Mark center-front notches at neckline and waistline positions.

Example C. Asymmetrical opening

This opening was originally used for matronly or middle-age women. Today new styles using the surplice opening have a young, dashing, and sophisticated look. The pattern for this opening is made in the same way as for the double-breasted garment.

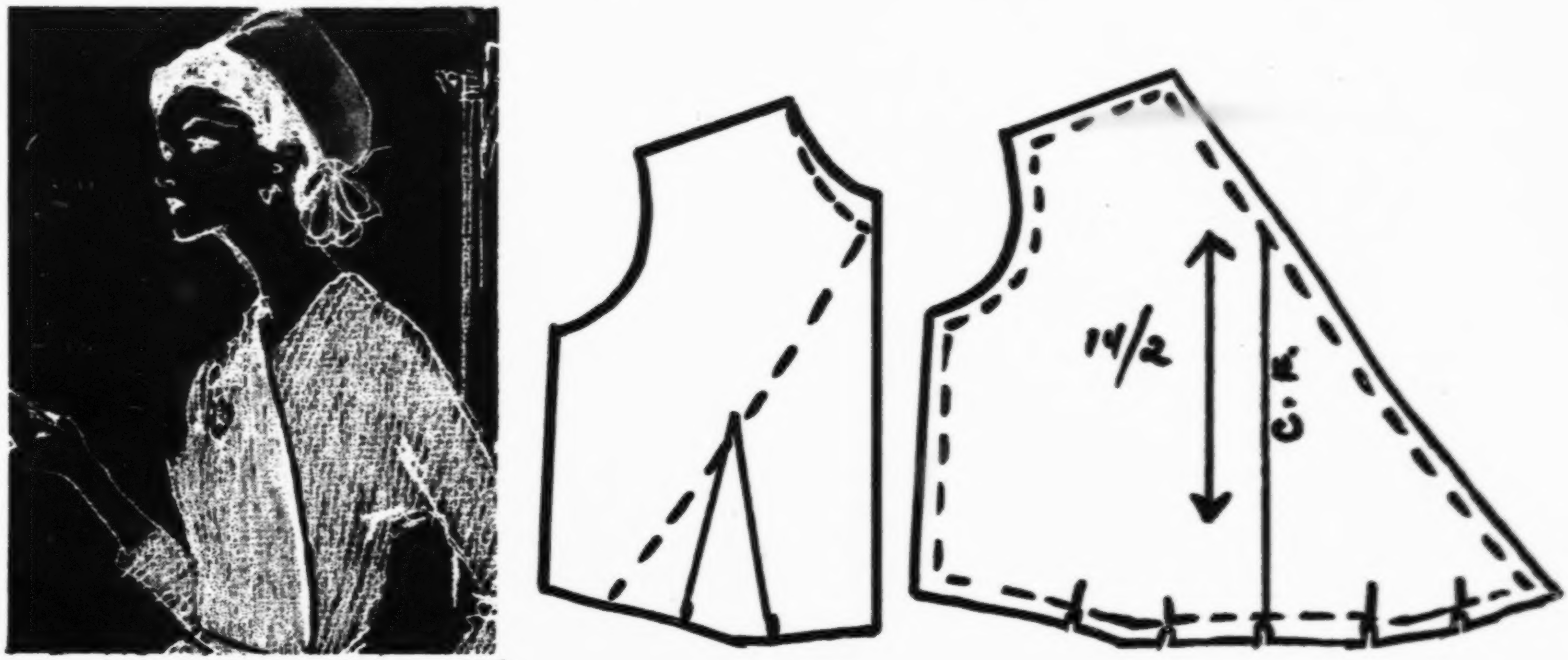


Fig. 177

1. Trace the front sloper on pattern paper, leaving enough paper for any additions to be made.
2. Drop the neckline ½ inch at the center-front.
3. Plan the style line for the surplice.
4. Draw this line on the draft, working from center-front to the right of center as the garment will be worn.
5. Fold paper on center-front line and trace style line. (Be sure you have enough paper underneath the fold to cover complete style line.)
6. Unfold the paper and draw the lines which form the surplice extension.

ASSIGNMENT:

1. Duplicate examples A, B, and C.

2. Design four different bodices (two double breasted and 2 surplice). Develop a pattern for two of these.

3. Practice adding different extensions to the basic sloper.

C. Facings for Extensions

Lesson 3

OBJECTIVES: To become familiar with the two types of facings for extensions.
To learn how to make the patterns for the two types of facings for extensions.

RELATED INFORMATION:

A facing will be necessary at the front edges of all open bodices and around shaped necklines. This facing is a matching section, cut on the identical grain of the fabric and exactly the same shape. It is stitched to the right side of the garment with right sides facing each other. It is then turned to the wrong side, pressed flat, and felled in place on the inside of the garment.

Fitted facings are used extensively throughout garment construction and are more popular than either bias bindings or bias facings. A fitted facing is one that is cut the same as the edge of the garment to be faced. It may be a separate piece that is to be sewn to the garment--the applied facing, or it may be cut in one piece with the bodice and simply turned to the inside of the garment on the fold line--the attached facing. Facings are used not only to finish a neckline, but also to finish any other opening of a garment.

The facing is usually of even width (from 2½ to 3 inches) and seamed at the shoulder.

PROCEDURE:

Example A. Attached facing for a single-breasted opening

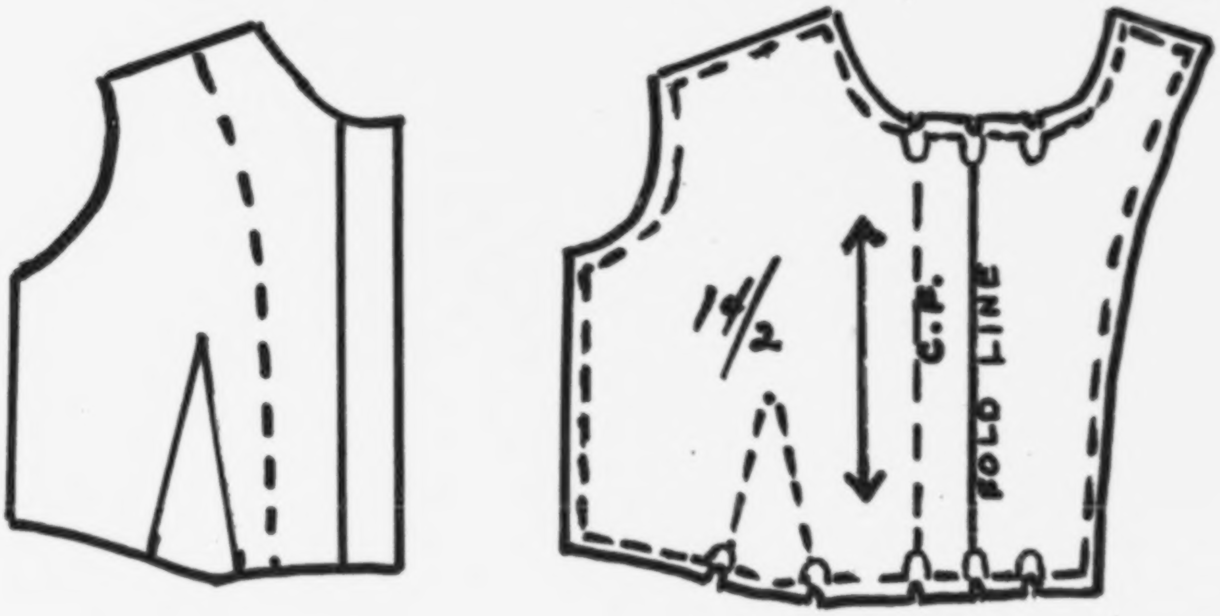
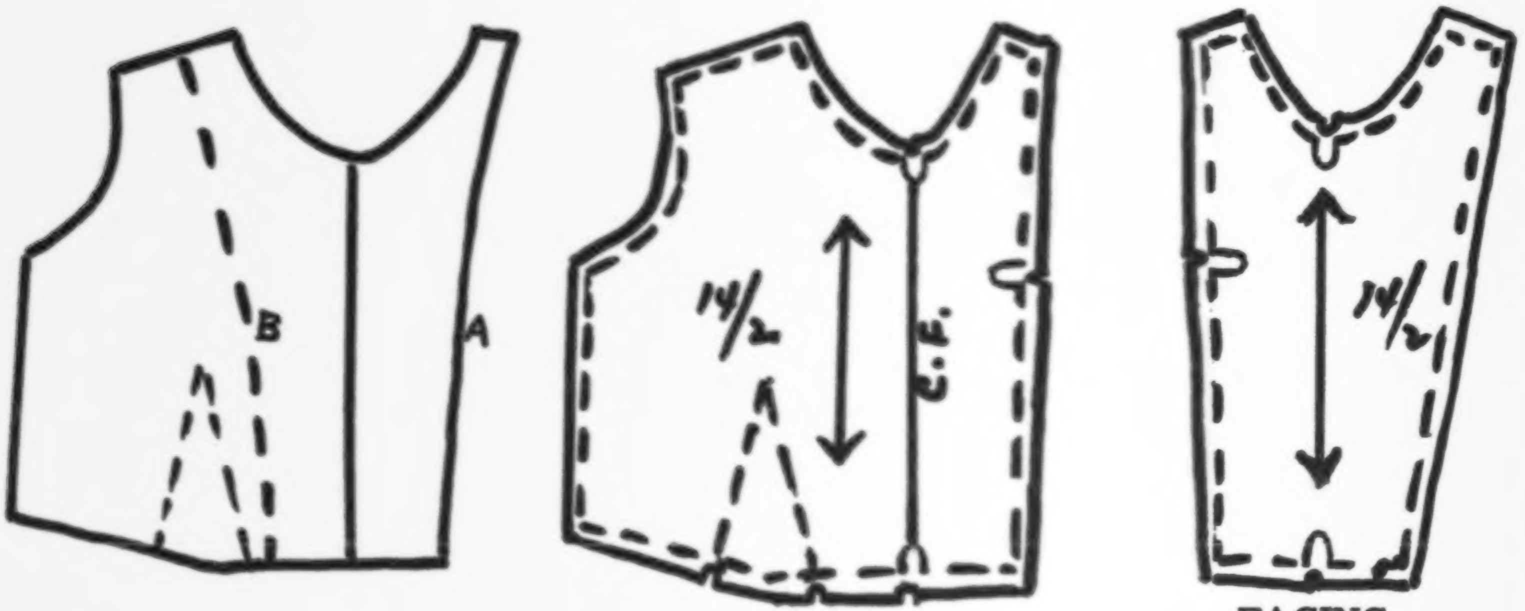


Fig. 178

1. After adding extension desired (Example A, Step 3 in previous lesson), plan the facing from shoulder to waistline. Make sure it is smooth.
2. To make the shape of the facing identical to the shape of the garment, fold paper on extension line and trace neckline, waistline, and shoulder from extension fold to end of facing.
3. Trace facing line from shoulder to waistline. Check it for smoothness.
4. Unfold the pattern.
5. Mark center-front with notches at neckline and waistline.
6. Place notches at fold line for extension; also at neckline and waistline.
7. Plan and mark position of buttonholes on pattern.
8. Complete pattern - seam allowance, grain, and notches.

Example B. Applied facing for double-breasted opening



FACING

Fig. 179

The double-breasted opening requires that a separate facing be applied to the garment. If pattern were to be folded on the extension line, which is off grain, the resulting facing would be considerably off grain.

1. After adding extension (A) (Example B, Step 9 in previous lesson), plan the facing and mark on front-bodice draft (B).
2. Trace facing pattern, which will include extension, shoulder line, waistline, neckline, and edge of facing.
3. Mark center-front position at neckline edge and waistline.
4. Place a notch at side of extension for matching bodice to facing.
5. Complete pattern: seam allowance, notches, grain, buttonhole markings.

ASSIGNMENT:

1. Develop facings for all the bodices in the previous lesson, including the assignment.

2. Develop an applied facing for the single-breasted bodice in this lesson.

3. Using the examples in this lesson, duplicate an attached facing and an applied facing in muslin.

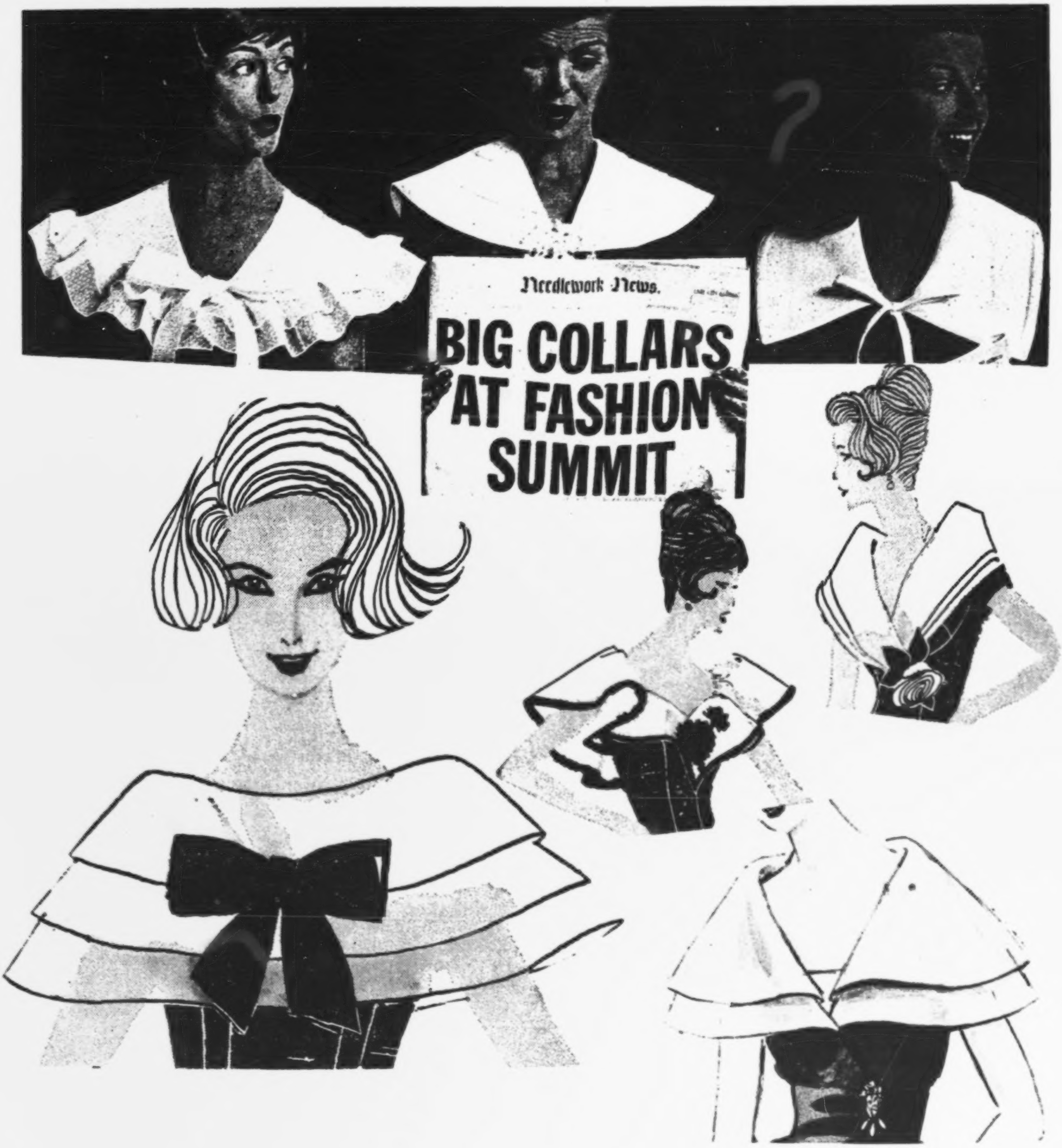

Needlework News.
BIG COLLARS AT FASHION SUMMIT

Fig. 183A

UNIT VI - COLLARS

A. Introduction Lesson 1

OBJECTIVES: To become familiar with collar types and names.
To become familiar with collar construction terms.

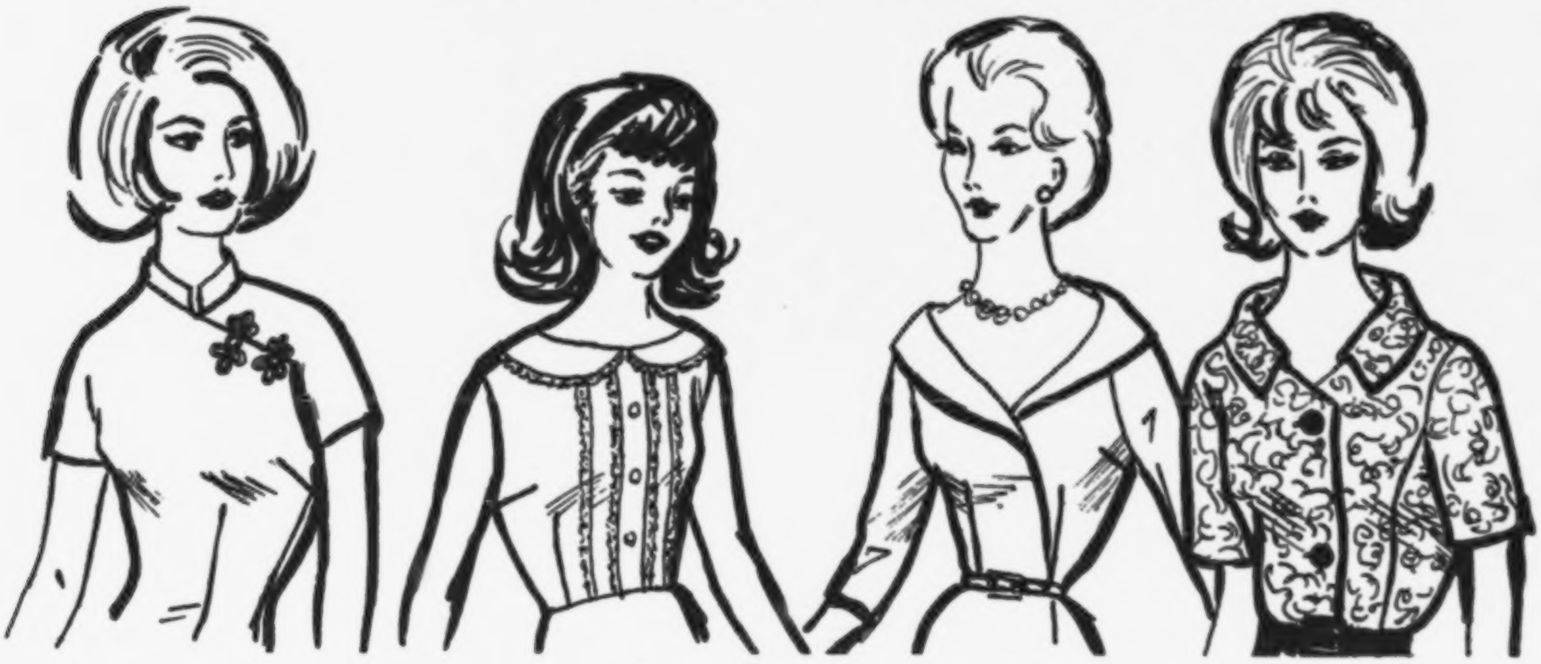


Fig. 183b

RELATED INFORMATION:

The collar is an article of dress, worn around the neck, that may be separate or attached to a garment. The collar line is a very important part of the garment. A well-fitting collar may make or break a garment. It must be comfortable and flattering. There are many varieties of collars a designer can think up, but most designers use "pet collars" repeatedly. These collars have proven themselves; they please many women and often account for the sale of the dress.

Collars are classified according to their various characteristics--width, shape of outside edge, neckline shape, and roll. The shapes may be round, square, peak (notched), etc. and may be worn high or low. Collars fall into two major classifications: (a) separate set-in collars, such as the Peter Pan or club, that is a small, round collar meeting in front: the mandarin or Chinese collar, which is a narrow, upstanding collar; and the bertha, a short cape that does not open in front; and (b) collars that are part of the bodice, such as the shawl. (See Fig. 183b)

No matter what the collar classification, collars fit into one of the following categories according to the collar roll--(a) flat-fitting, (b) rolled, and (c) stand-up. This is determined by the relationship of the neckline edge or fit-line of the collar to the neckline of the garment.

For instance, if the collar neckline has the same curve as the garment neckline, the collar lies flat; if the collar neckline has more of a curve than the garment (i. e., it is more concave), it ripples; and if the collar neckline is less curved (less concave) than the garment, it rolls. The extent of the collar roll depends upon the relationship of the two shaped lines which are joined--the neckline of the garment and the neckline edge of the collar. There are many degrees of roll - high, medium, low, and flat. The stand-up collar, such as the Chinese collar, has no roll at all.

In the development of collar patterns, there are two methods used: (a) around-the-neck measurement, using back and front slopers, and (b) straight construction, using back and front measurement.

The neckline shape or fit-line of the collar may have one of three distinct shapes: straight, concave, or convex.

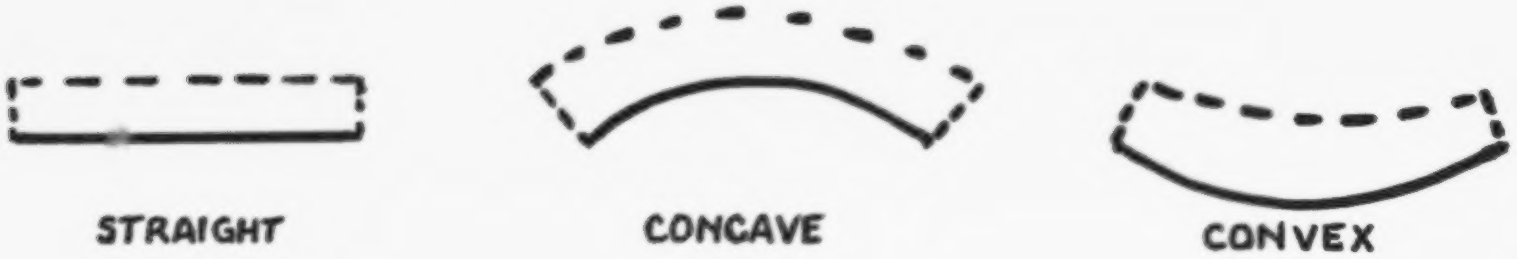


Fig. 184

There are certain terms in collar construction with which you should be familiar, since we refer to them constantly in making the collar pattern.

A. Neckline or fit-line - the collar line that is stitched to the neckline of the garment.
B. Style line - outer edge of collar.
C. Roll line - the line along which the collar turns down.
D. Stand - the rise of the collar to the roll-line--the height of the roll.
E. Break line - also called crease or fold line - is the continuation of the roll line toward the opening of the garment.

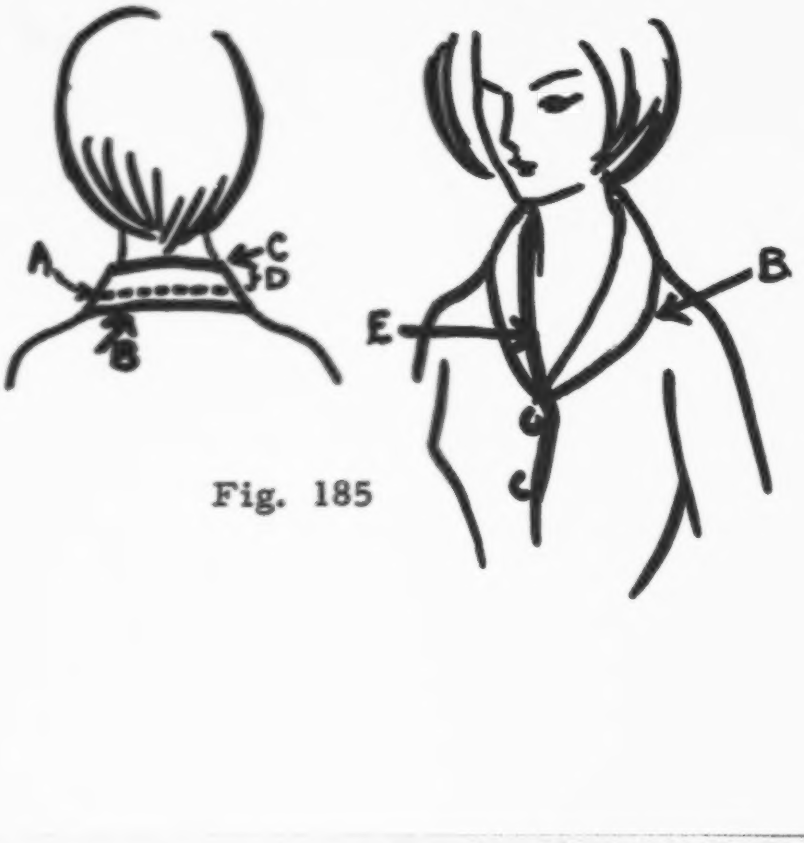


Fig. 185

To describe a collar it really is necessary to indicate both its degree of roll and its silhouette, such as a Peter Pan or a flat sailor collar.

Regardless of what neckline is used to construct the collar, the size and shape of the style line must be in proportion to the effect desired. Points, notches, curves of a collar are alike on both sides of the front or back of the garment. Most collars do not extend beyond the center of the neck opening, unless this arrangement is part of the decorative plan.

Collar patterns with straight style lines may be made in one piece (to be folded double), but most collars are cut of two layers of fabric. For each collar a pattern must be made for the top collar and the under-collar.

ASSIGNMENT:

1. What are the two major collar classifications?
2. Into what three categories do collars fall?
3. Do you have a "pet collar"? If so, describe it.
4. Give the names for the (a) neckline edge of the collar and (b) the outside edge of the collar.
5. What are the three distinct shapes of the neckline edge of collars?
6. Bring in six pictures of bodices with separate, set-in collars.
7. Bring in six pictures of collars that are part of the bodice.
8. Trace the collar pattern sketched below and design three new collars by changing the style line only. Make the complete collars.

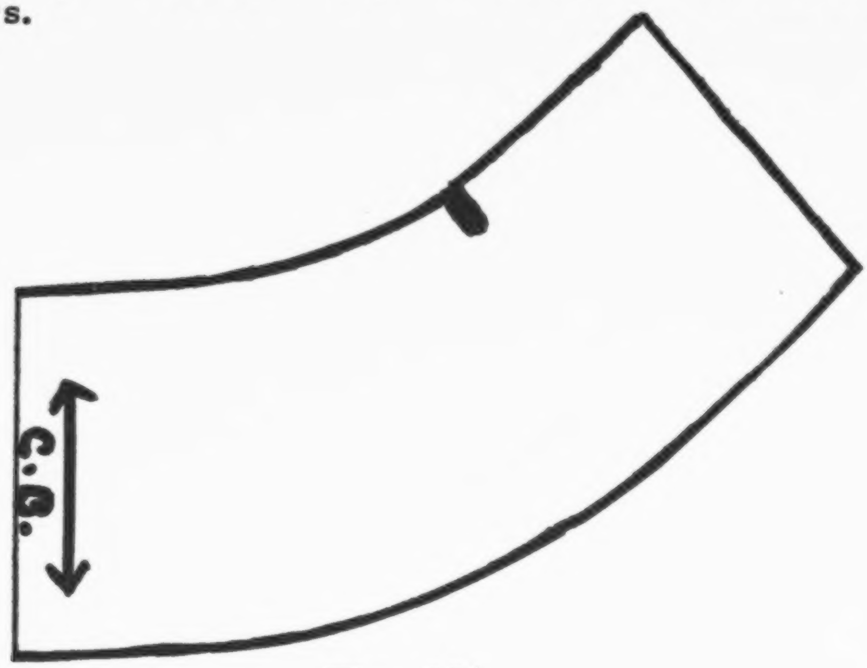


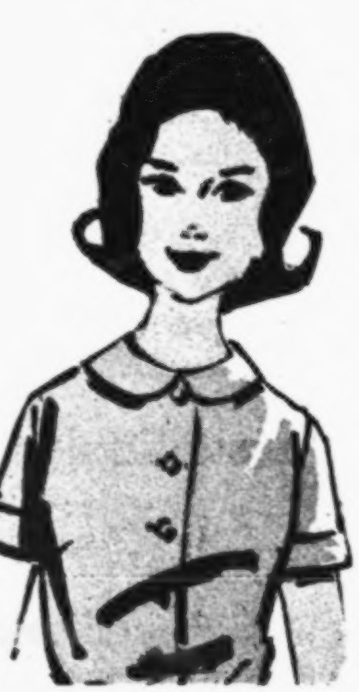
Fig. 186

B. Flat-Fitting Collars

Lesson 2

OBJECTIVES: To learn the basic rule for making flat-fitting collars.

To learn how to make different flat-fitting collars.



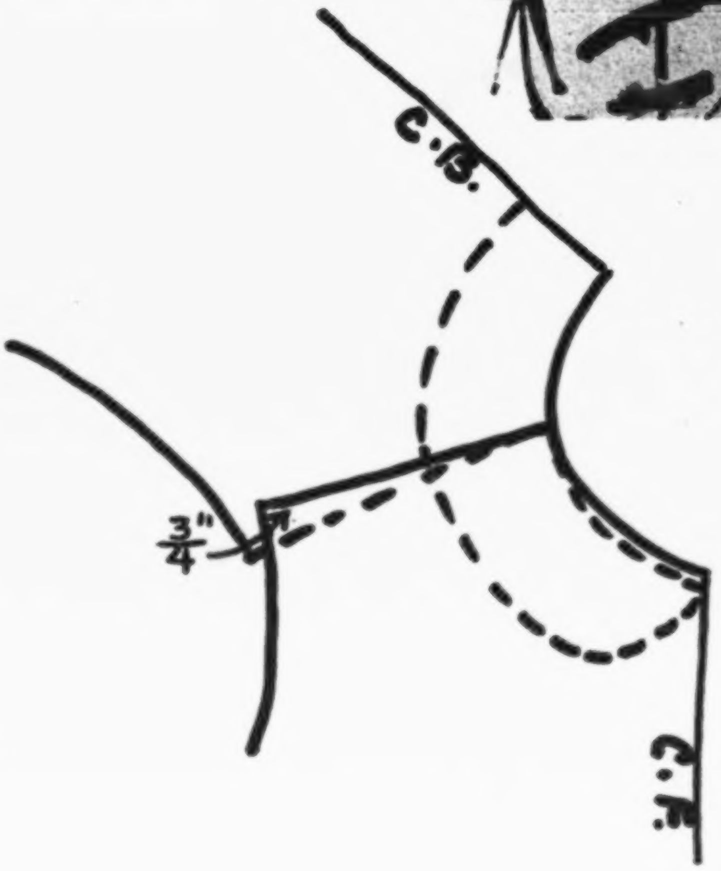
RELATED INFORMATION:

The basic rule for styling flat-fitting collars is that they follow the exact shape of the neckline. They are the simplest type of collar to construct. They fall flat from the neckline without any standing roll. The flat-fitting collar may range from one inch in width to the full width of the shoulder. Before designing the collar it is important to establish a becoming and comfortable neckline shape. For the regular high neck, as a rule, the front sloper may be lowered $\frac{1}{2}$ inch at the neckline to give room for the collar, but the shoulder and back neckline are not changed.

PROCEDURE:

Example A. Flat-fitting Peter Pan collar

1. Place front and back shoulders of basic slopers together, matching at the neckline and overlapping $\frac{3}{4}$ inch at shoulder. (The back bodice will extend at the armhole, due to the extra ease allowed in the back-shoulder measurement.) Trace neckline, shoulder seam, and a few inches of back and front slopers.



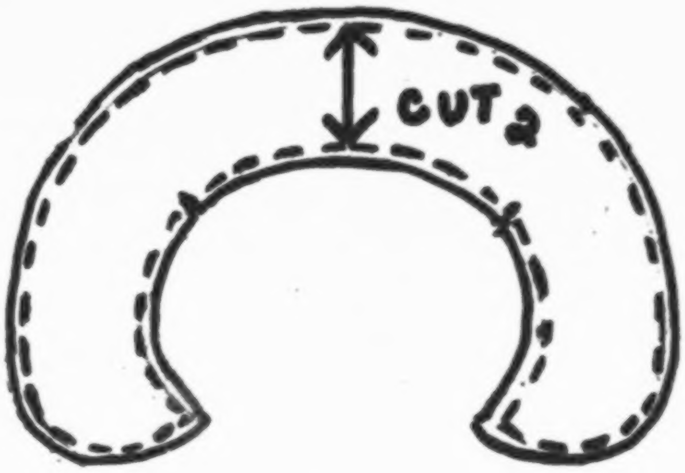


Fig. 187

2. Lower neckline ½ inch at center-front. Draw smooth fit-line from center-front to shoulder. (There is no change at the shoulder seam or back neckline.)
3. Decide width of collar at center-back and measure evenly around the complete neckline.
4. Shape front of collar according to shape desired. This may be pointed or round.
5. Trace collar, using the new fit-line and style lines for guides.
6. Crossmark collar at shoulder seam for matching to garment.
7. To make a one-piece collar, trace collar with center-back of collar on fold of paper.
8. Add seam allowance (¼ inch) around complete collar and place notches for matching.

Example B. Flat-fitting sailor collar

1. Place front and back shoulders of basic sloper together, matching at the neckline and overlapping one inch at the shoulder. Trace as before.
2. Determine the depth of V neckline at the center-front and crossmark. Connect crossmark to shoulder at neckline.
3. Decide the width (depth) of collar at the center-back and crossmark.
4. Square a line from center-back along the desired depth of the collar.
5. Using your square, locate the point where the back style line of the collar makes a right angle when it is connected to the center-front V. Draw this line.
6. Trace collar with center-back on fold of paper.
7. Crossmark collar at shoulder seam for matching to garment.
8. Add seam allowance ($\frac{1}{4}$ inch) around complete collar and place notches for marking.
9. Develop both upper- and under-collar patterns. The upper collar must be at least $\frac{1}{8}$ inch larger along the back edge and at the square corner, reducing to no difference at point of collar at the center-front. The added width to the top collar gives a better fit and helps to conceal the seam where the two collars are joined.

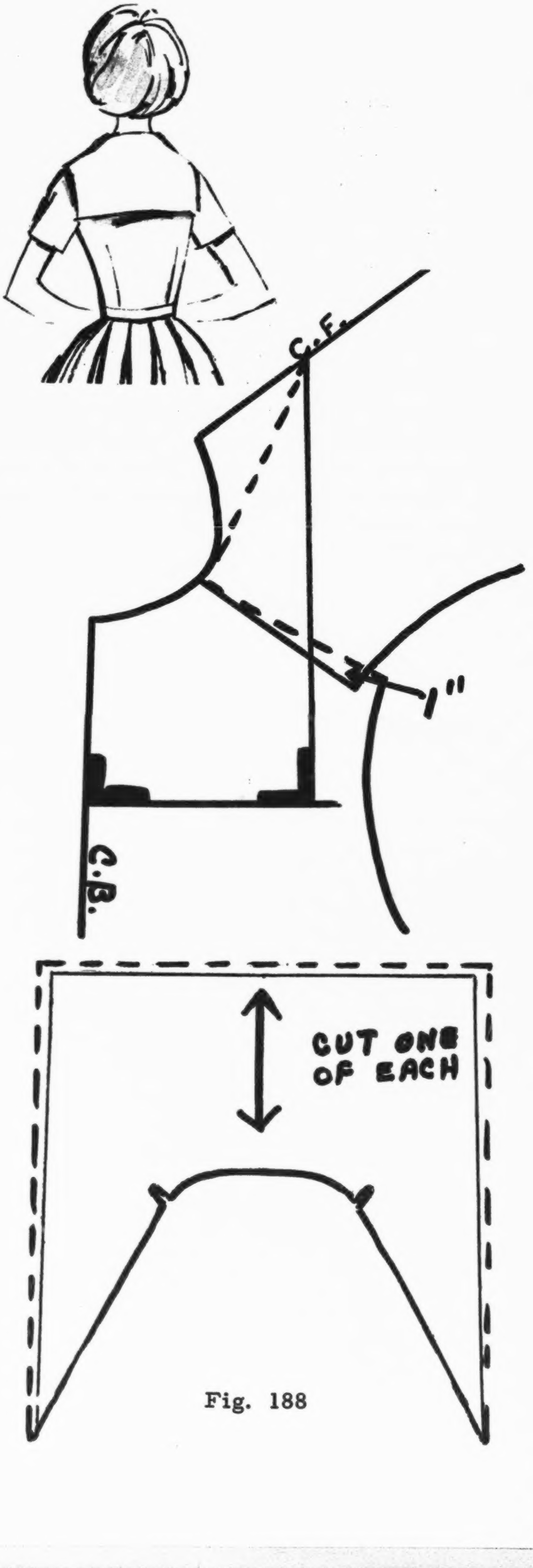


Fig. 188

To make sure that the seamline is concealed, always make the upper collar a little larger than the under-collar. The amount of the difference added to the top collar depends upon the weight of the fabric. One-eighth inch should provide enough ease for the collar to conceal the seam in an average-weight fabric. On heavier fabric it may be necessary to allow slightly more width to the upper collar.

ASSIGNMENT:

1. Develop collar patterns A and B.
2. Develop a pattern for a sailor collar without overlapping the shoulder seams of the slopers. Compare the collar with the collar developed in Number 1 as to fit, the relationship of the fit-line of the collar to the neckline of the garment, and the shape of the collar.
3. Using the procedures in A and B, develop a round bertha collar, a square bertha collar, and a shawl collar. All are to be flat-fitting collars.

C. Rolled Collars — Lesson 3

OBJECTIVES: To learn the basic principles of "stand and roll."
To learn how to develop collars that have a roll.

RELATED INFORMATION:

Rolled collars rise from the neckline of the garment for some determined height before folding over to rest on the shoulders. The more nearly the collar neckline approaches a straight line, the more it will roll. When the neckline of the collar becomes a convex curve, the roll will be still deeper. All flat collars can be developed with a roll.

Rolled collars can be divided into two types--(a) those in which the fold-line or break-line of the collar hugs the side and back of the neck, and (b) those in which the fold- or break-line of the collar stands away from the neck.

In a rolled collar, material must be added for the stand at the neckline. In figuring the amount of material for stand and roll, the ratio is 2:1--that is, if you are planning a one-inch stand, you will have to allow 2 inches of extra material in order to have a rolled collar.

PROCEDURE:

Example A. Peter Pan rolled collar

1. Front collar (Fig. 189-A)
    a. Trace upper part of basic front sloper.
    b. Adjust neckline: Center-front of neckline may be lowered $\frac{1}{4}$" to $\frac{1}{2}$" for ease at neckline. Use a $\frac{3}{8}$" adjustment for this collar.
    c. Plan style line of collar on front sloper. Mark an even amount (use 2") from neckline to style line of collar. Connect with a smooth line.
    d. Draw a straight line from front shoulder to lowered center-front neckline--the measurement of the sloper neckline.

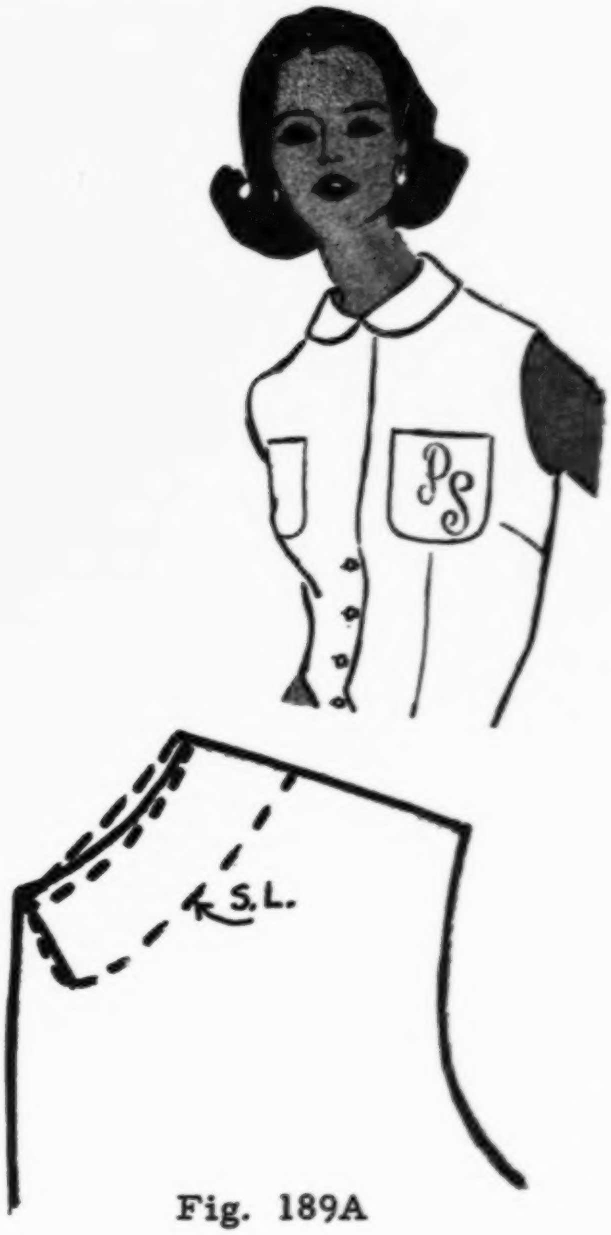


Fig. 189A

2. Back collar (Fig. 189-B)

   a. Trace the upper part of back sloper.
   b. Extend center-back 2 inches, to point E, for stand and roll. (The length B to E is determined by the amount of stand desired.)
   c. Square a line from center-back extension equal to the back sloper neckline measurement. (EC = AB, measured along the curve.)
   d. Measure distance from neck to collar style line on front sloper and draw corresponding style line on back draft.
   e. Draw a line from C to style line D.
   f. Copy back collar.

3. To complete collar (Fig. 189-C)

   a. Place back collar traced in F above next to front collar, matching style lines of back and front.
   b. True neckline of collar with a smooth curved edge.
   c. Copy complete pattern. Place a notch at shoulder position.
   d. Add $\frac{1}{4}$" seam allowance around the complete collar. This will be the pattern for the under-collar (Fig. 189-D).
   e. Make top collar pattern with $\frac{1}{8}$" additional seam allowance around style line.

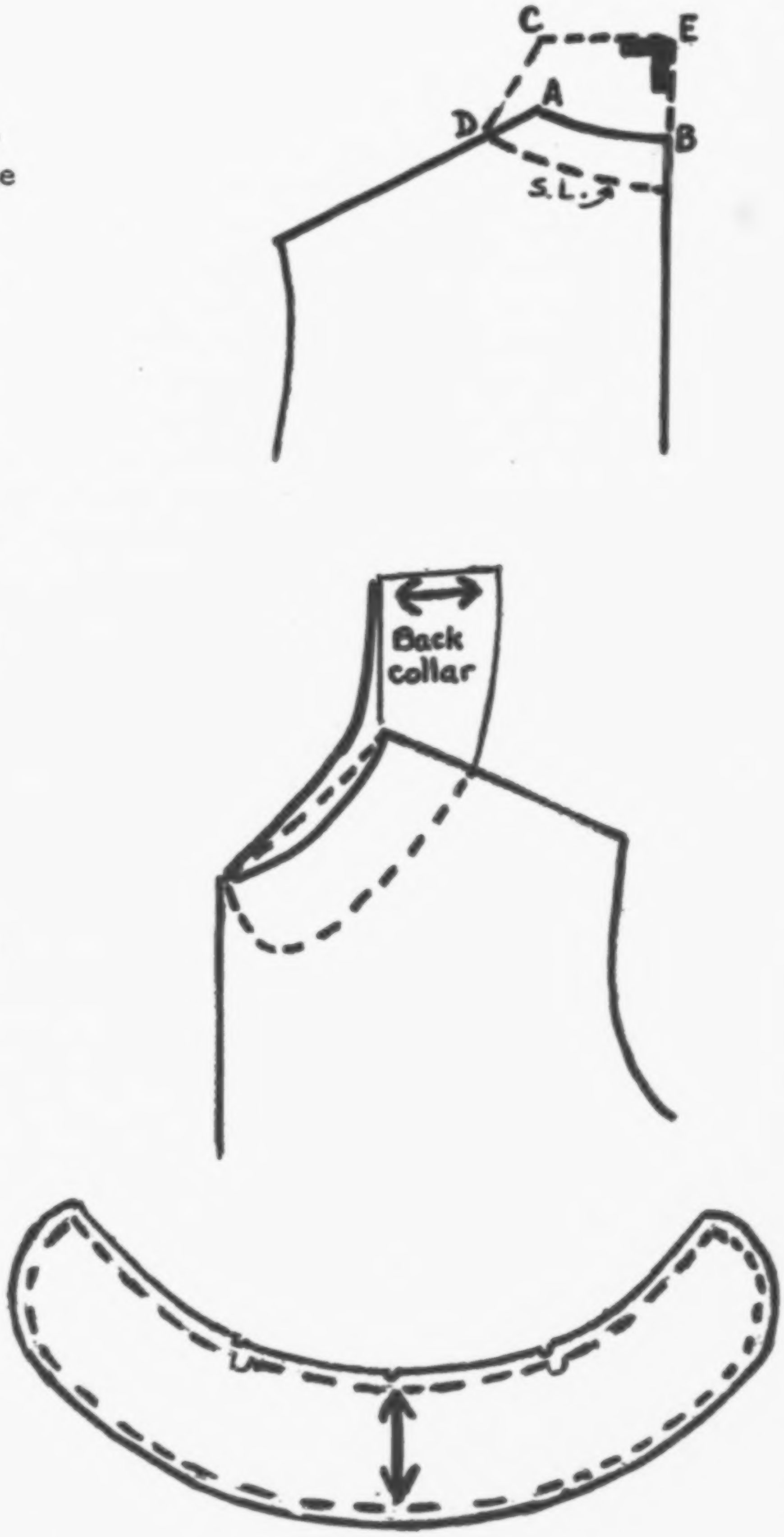


Fig. 189-B, C, D

Example B. Controlled shawl collar

1. Back collar (Fig. 190-A)
   - a. Trace upper part of basic back sloper.
   - b. Extend center-back for stand and roll. If a one-inch stand is desired, there must be two inches allowed to take care of roll. Use 2 inches for this collar (EB).
   - c. At this point square a line equal to the back sloper neckline measurement. (CE = AB, measured along the curve.)
   - d. Mark the style line for collar at shoulder and center-back neckline. Connect these two points with a smooth, rounded line (SL).
   - e. Draw a line from point (C) to point (D) at shoulder.

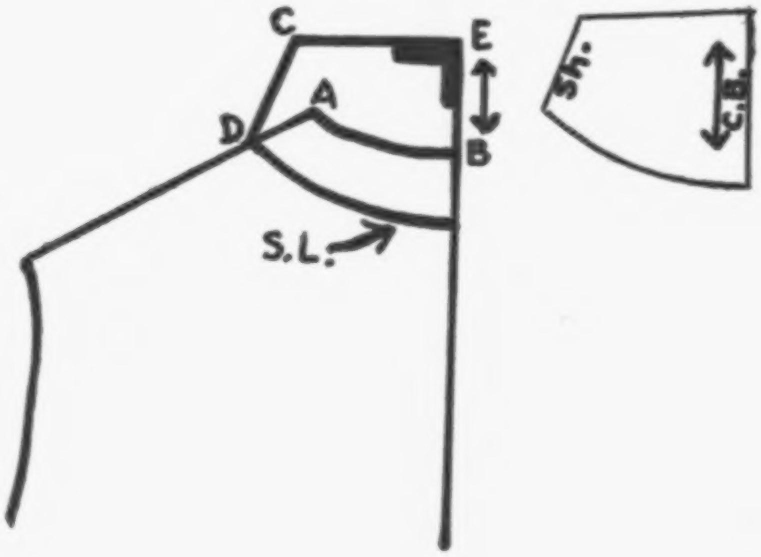


Fig. 190-A

2. Front collar (Fig. 190-B)
   - a. Trace upper part of front bodice sloper.
   - b. Determine the depth of the V neckline and crossmark. Connect this crossmark to the point where shoulder and neckline meet. This line represents the roll line of the collar.
   - c. On front shoulder, measuring from neckline, place a crossmark to equal AD, the distance between sloper neckline and style line on the shoulder of back draft. Connect this crossmark to the bottom of V neckline. This represents the front collar line.

3. To complete collar
   - a. Place shoulder of back collar along shoulder of front collar, matching collar lines.
   - b. Connect back collar neckline to V-front crossmark.
   - c. True neckline and collar lines as illustrated (dotted lines).
   - d. Trace complete collar draft (neckline and collar lines). Place a crossmark at the shoulder seam. (Fig. 190-C).

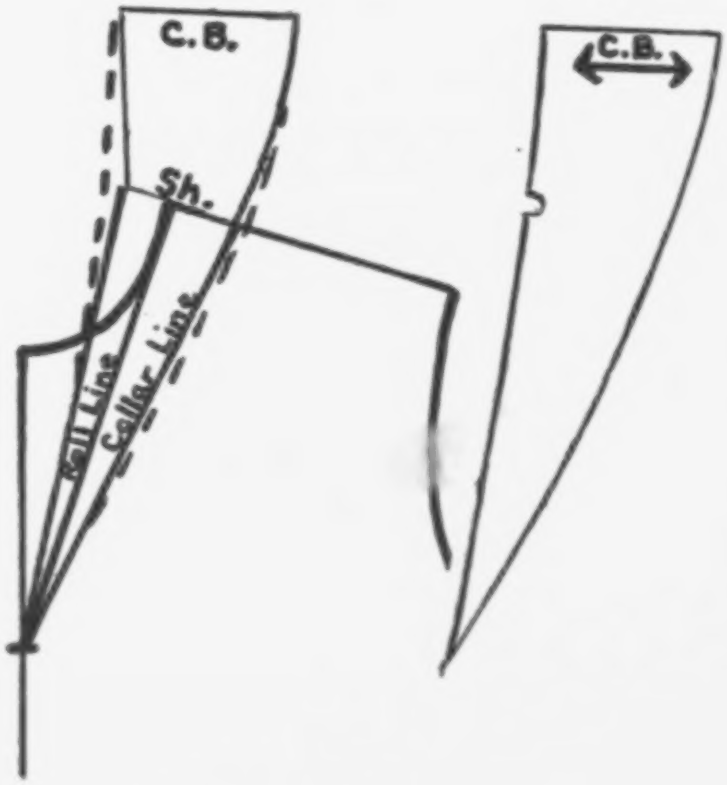


Fig. 190-B, C

e. For final pattern, trace collar draft with center-back on fold of paper.
f. Indicate grain line parallel to center-back.
g. Add seam allowance and notches (Fig. 190-D).
h. Top collar should be cut larger than under-collar at collar line only. This will conceal collar seam and give better fit. ($\frac{1}{16}$" - $\frac{1}{8}$" difference, depending upon thickness of fabric.)

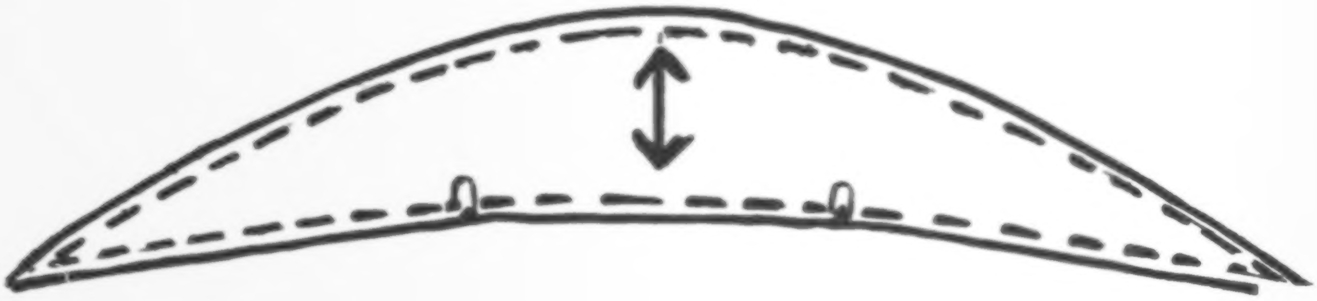


Fig. 190-D

ASSIGNMENT:

1. Develop collar patterns A and B.

2. Develop two variations of the shawl collar.

3. Using instructions in this lesson for developing a rolled collar, make a rolled sailor collar pattern.

4. Develop one of the above collars in muslin.

5. Figure the extra amount of material needed for the roll for the following collars:

	Stand	Material needed
a.	$\frac{3}{4}$"	____________
b.	$\frac{5}{8}$"	____________
c.	$1\frac{1}{4}$"	____________
d.	$1\frac{3}{16}$"	____________
e.	$\frac{7}{8}$"	____________

D. Collars Cut-in-One With the Waist Lesson 4

OBJECTIVE: To become familiar with the collars that are made in-one with the front bodice.

RELATED INFORMATION:

Most collars are cut and made separate from the bodice. An exception to this is the shawl collar. The shawl collar can be made separately, but most of the time it is cut as an extension of the front bodice, with a seam in the center-back.

The cut-in-one roll or shawl collar is entirely different in cut from other types of collars. It has the under-collar cut as part of the front, while the upper collar is cut as part of a facing.

Another type of collar that can be cut-in-one with the bodice is a simple band that is part of the front and is sewn into the back neckline.

PROCEDURE:

Example A. Simple band attached to the bodice

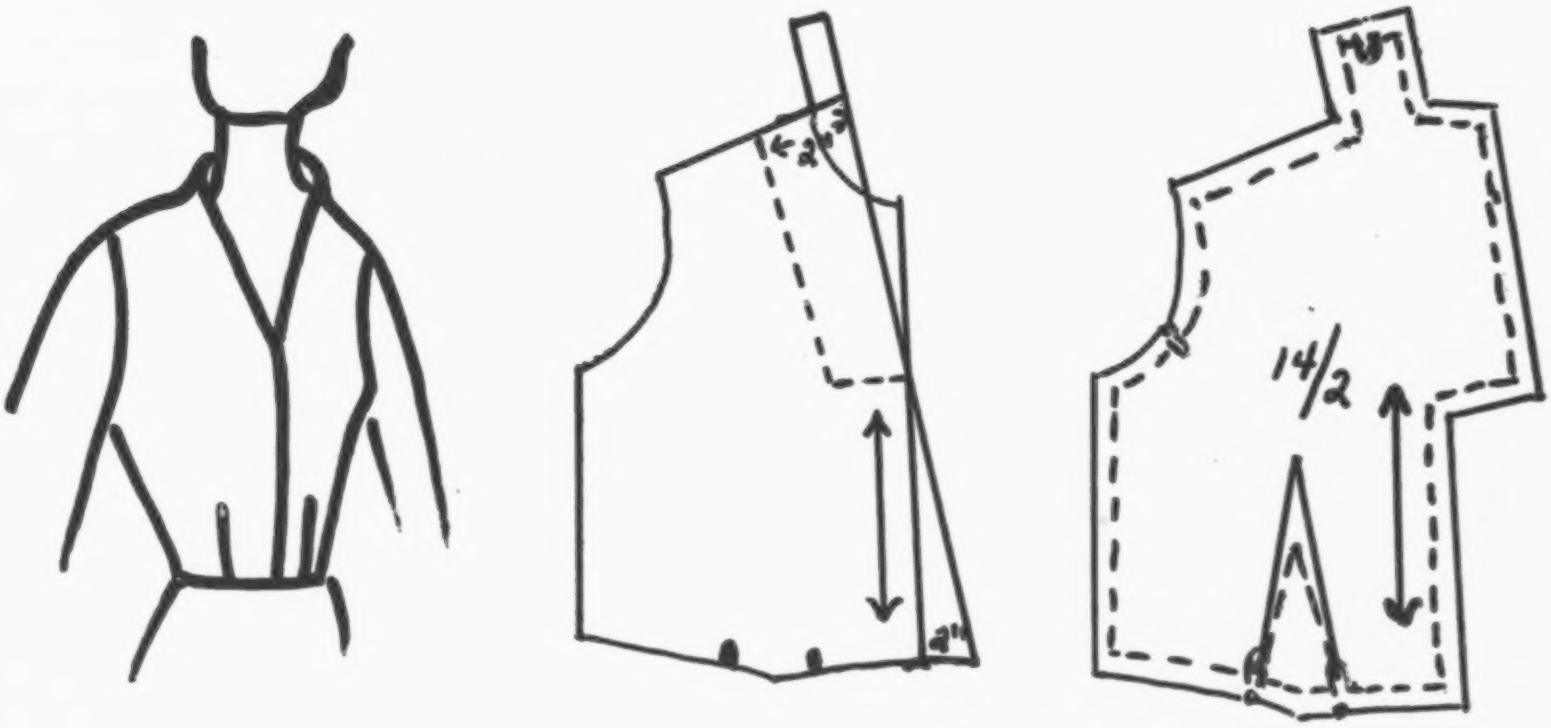


Fig. 191

1. Trace basic front waist sloper.
2. Add 2 to $2\frac{1}{2}$ inches at the waistline at the center-front.
3. Extend shoulder $\frac{3}{4}$ inch at neckline.
4. Connect addition at center-front waistline to extended shoulder point. This is the style line.
5. Mark back-neck measurement (A) along this line, extended above shoulder.
6. Form band at back by completing rectangle, as shown.
7. Mark position of facing on draft 2 inches in from style line at shoulder and parallel to neckline opening for a distance of about $6\frac{1}{2}$ inches down from center-front neckline, or the length of opening desired. Square a line to center-front.
8. Fold on style line and trace facing and band collar through draft to paper.
9. Open fold and add seam allowances- $\frac{3}{4}$" seam at shoulder, $\frac{1}{4}$" at neckline seam of back band, and $\frac{3}{4}$" at center-back.

Example B. Shawl collar cut-in-one-with bodice

I. Front collar

a. Trace basic front waist sloper.
b. Add a 1-inch extension to left of center-front (as worn) (line AB).
c. Crossmark desired break line on extension line. (Use 7 inches from waistline for point B.)
d. Extend shoulder $\frac{3}{4}$ inch (C).
e. Draw a line from extended shoulder mark (C) along desired roll and break line (B).

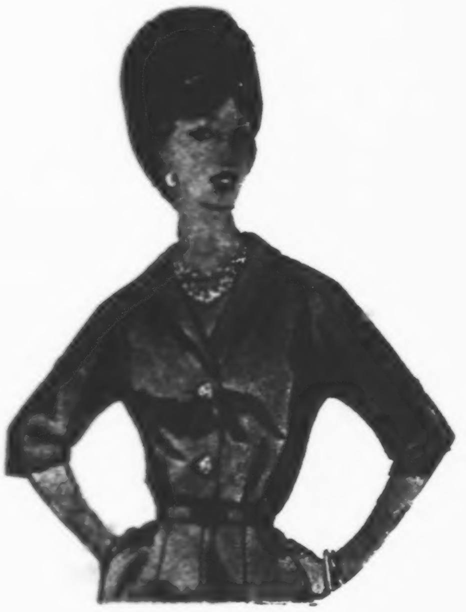


FIG. 192

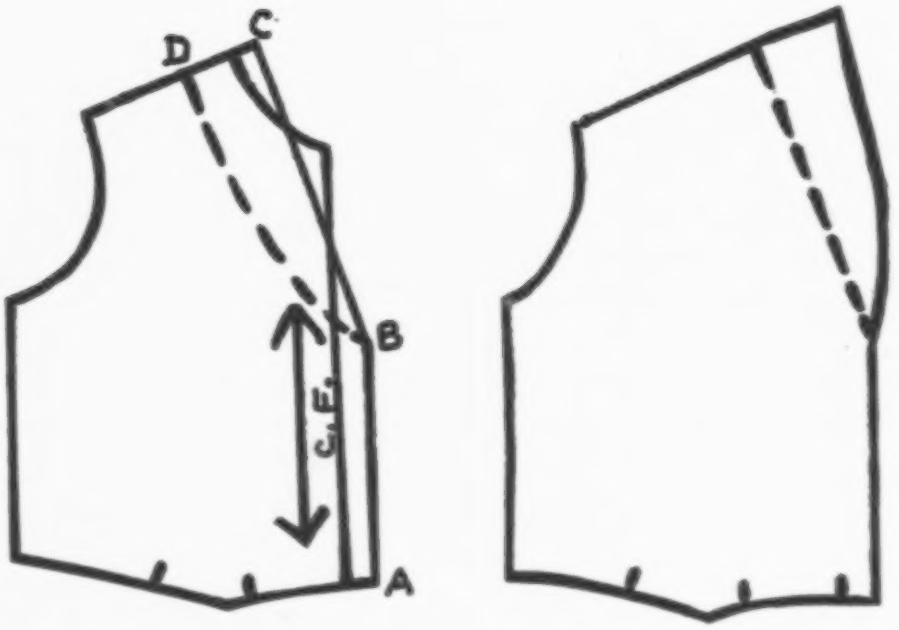


Fig. 192A

f. Draw in desired style line of collar on front draft. (This is done in the position the collar will be in when worn - line BD.)
g. Fold paper on roll and break line (Step e) and trace collar style line through folded paper, using tracing wheel.

II. Back collar

a. Trace the upper part of back sloper.
b. To make a 1-inch roll at center-back, extend center-back 2 inches.
c. Square roll line and make it equal to back neck measurement (EF).
d. Measure distance between front collar style line and original neckline at front shoulder position. Crossmark this measurement on the back shoulder position (G).
e. At center-back measure $1\frac{3}{8}$ inches down from regular neckline for collar style line (H).
f. Draw in back style line from (H) to (G).
g. Connect style line at back shoulder (G) to neck measurement (F).
h. Trace back collar. Label center-back and shoulder position clearly.

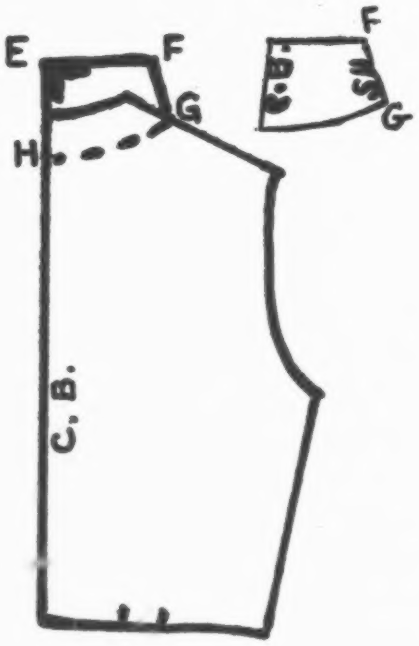


Fig. 192B

III. To complete collar

a. Overlap tracing of back collar at front style line, having point F about $\frac{3}{4}$" below extended shoulder line. This will form your under-collar attached to front bodice.
b. Mark facing on front draft with a line starting $1\frac{1}{2}$" in from regular neckline at shoulder position and continuing down to 2 inches in from center-front at the waistline.
c. Complete bodice and under-collar pattern.
d. Copy collar and facing, adding $\frac{1}{8}$ inch to the style line of collar as far down as the breaking point.
e. Complete pattern--seam allowances, notches, grain, etc.

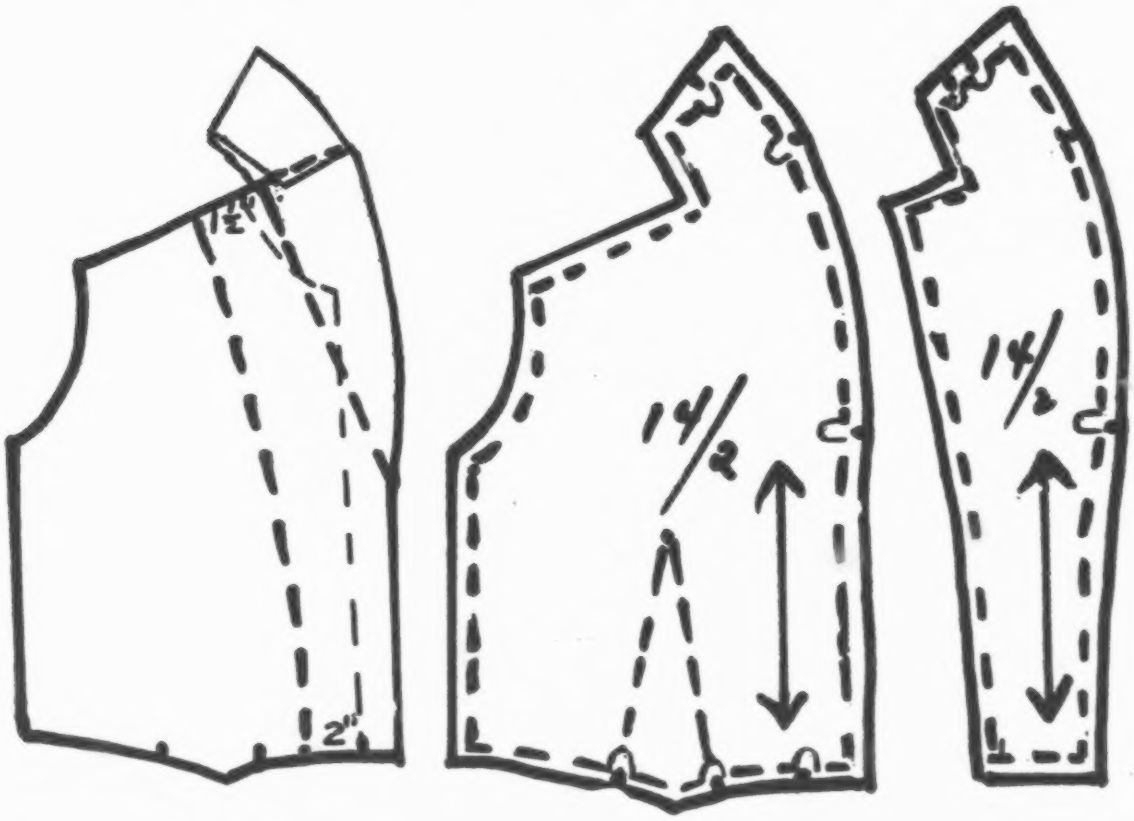


Fig. 192C

ASSIGNMENT:

1. Develop collars A and B.

2. Collect six pictures of band collars attached to the bodice.

3. Collect six pictures of shawl collars.

UNIT VI - COLLARS

E. Developing Collars Using Straight-Line Construction — Lesson 5

OBJECTIVE: To learn to develop collars using straight-line construction.

RELATED INFORMATION:

In drafting band collars, the important measurements are: (a) neckline measurement from center-back to shoulder; and (b) complete measurement from center-back to center-front. The center-front of the neckline may be lowered $\frac{1}{4}$ to $\frac{1}{2}$ inch to provide more ease at the neckline. This neckline change must be made on the sloper before measuring the neckline for the drafting of the collars.

PROCEDURE:

Example A. Two-piece band collar with knot

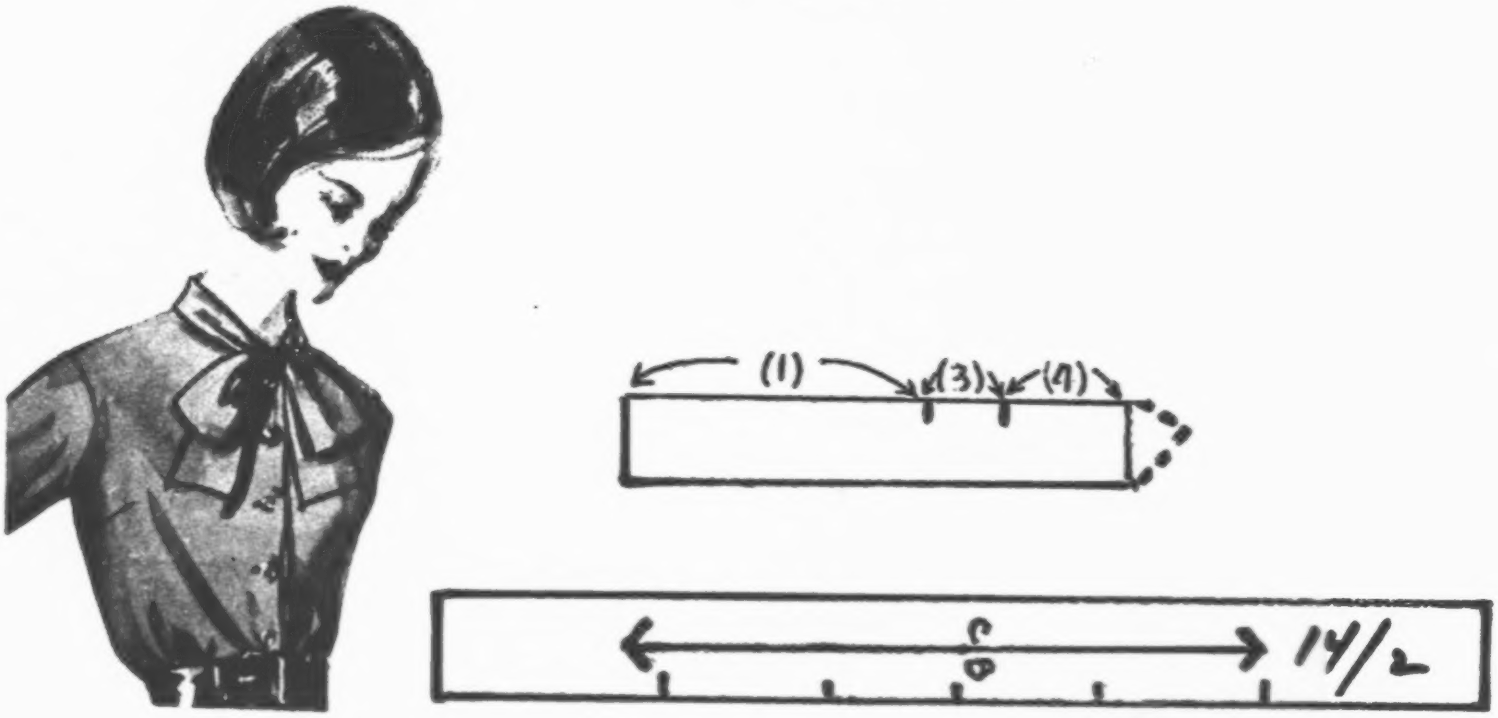
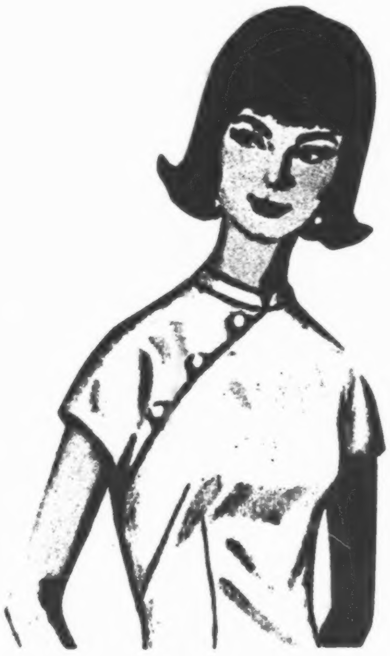


Fig. 193-4

1. Draw a straight line, marking off one-half of the complete neck measurement.
2. Square a line the desired width of the collar.
3. Add $1\frac{1}{2}$ inches to the length for a knot.
4. Add 6 inches for tie; the end can be shaped to any desired style.
5. Complete pattern by placing center-back on folded paper and copying draft. Place a notch at center-back, shoulder, and center-front.
6. Add seam allowances.

Example B.
Mandarin collar (coolie, Chinese, military, stand-up collars)



The mandarin collar may be designed to meet at the center-front or end somewhere between the center-front and shoulder of the garment. Any neck change at the center-front should be marked on the sloper before measuring neckline for drafting of collar.

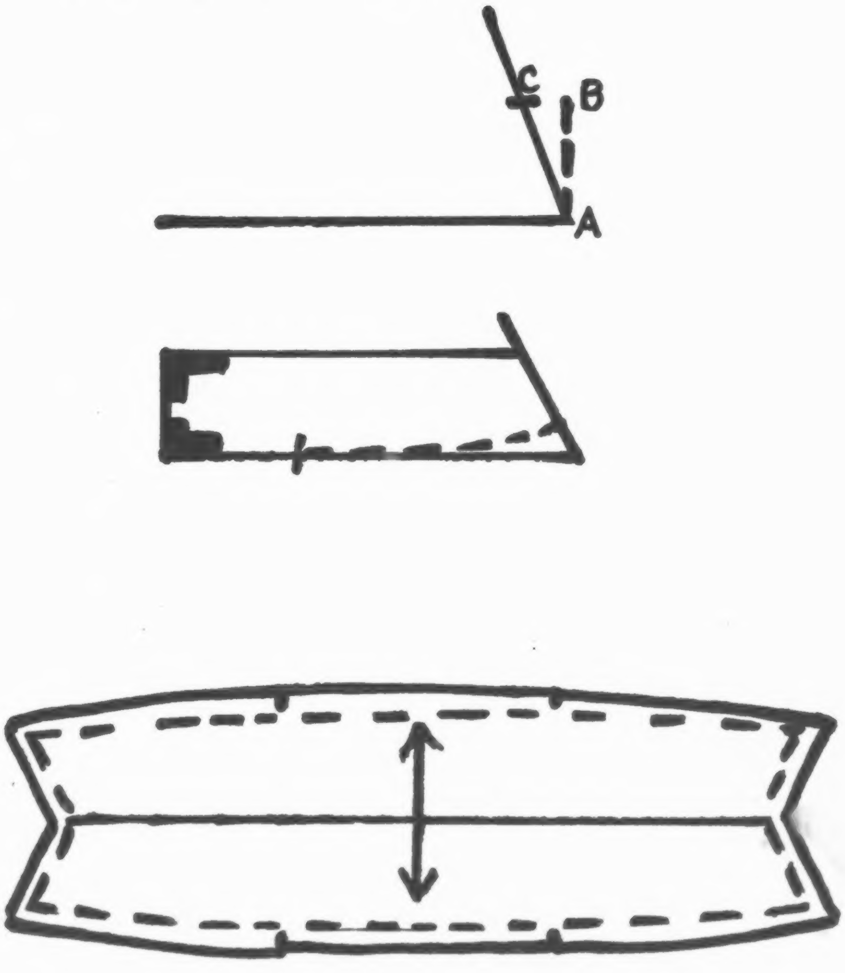


Fig. 195

1. Draw a line equal to one-half of the length of neckline. Mark point (A).
2. From (A) square a line up 2 inches and mark (B).
3. Measure in $\frac{1}{2}$ inch from position (B) and crossmark (C).
4. Draw a line indefinite in length from (A) through (C). This line shapes the front end of collar parallel to the center-front of figure regardless of the length or width of collar.
5. At center-back, square a line the desired width of collar.
6. Square a line across from center-back to meet front end of collar (line AC).
7. From center-back, measure length of back neckline and crossmark. This indicates position of the shoulder.
8. On center-front line, measure up $\frac{1}{2}$ inch and crossmark.
9. Connect both crossmarks with a dotted line.
10. Curve a new neckline as illustrated.
11. Trace collar with center-back of draft on fold of paper. To make a one-piece collar, place the style line on a fold of paper perpendicular to the other fold.
12. Indicate grain line, shoulder notches, and add seam allowance.

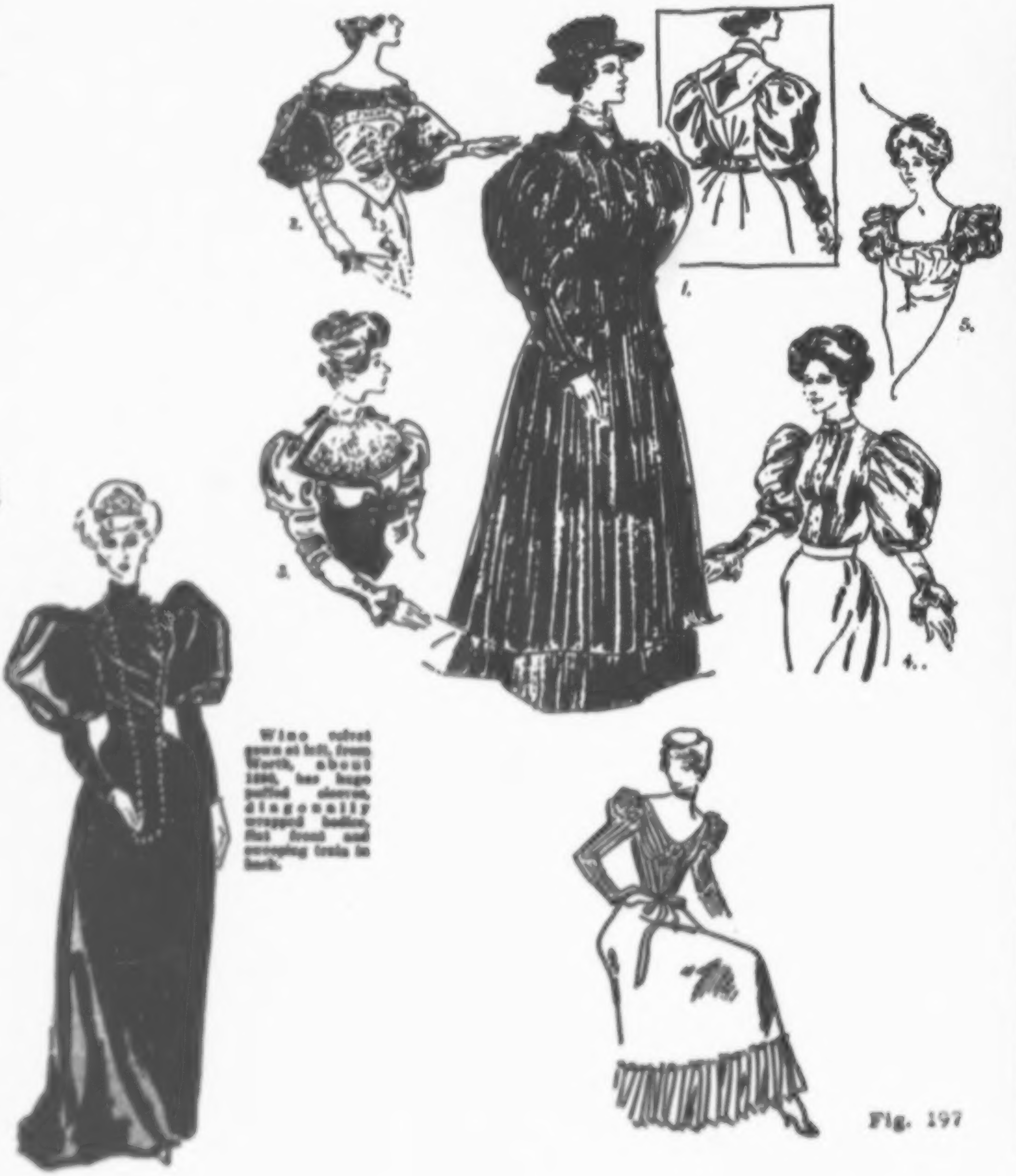
ASSIGNMENT:

1. Develop patterns A and B.
2. Bring in six sketches or pictures of designs with band collars.
3. Develop one of the above sketches in fabric.

SLEEVES

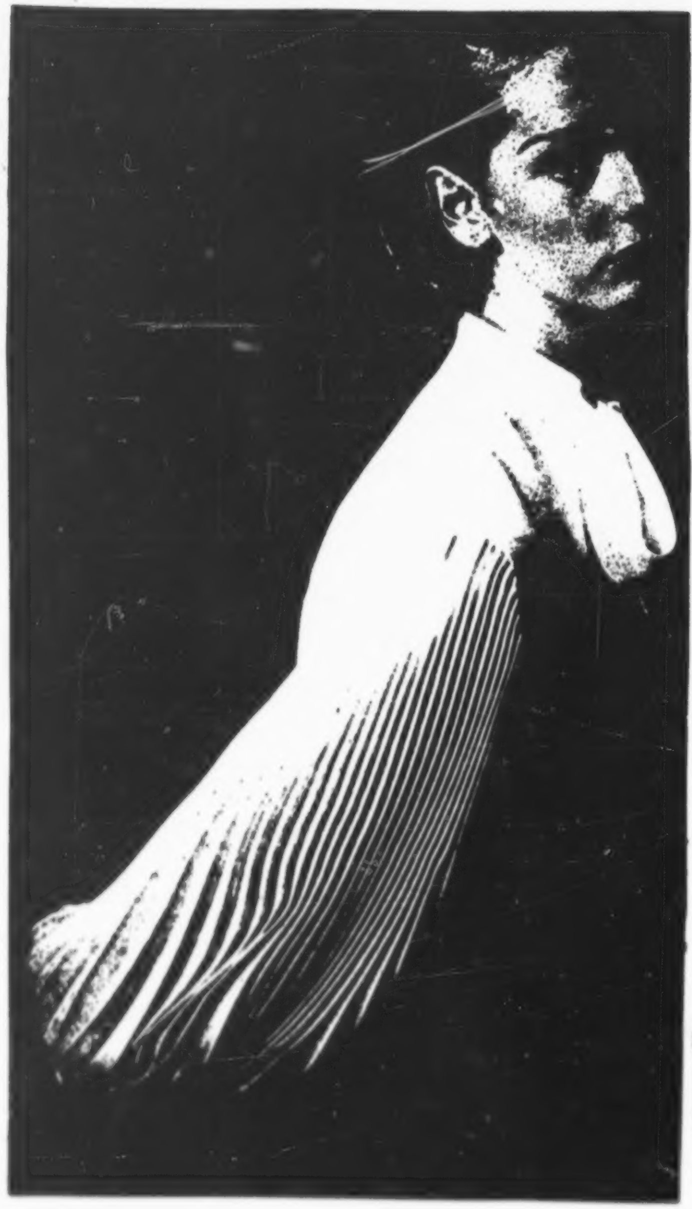
Gibson Girl

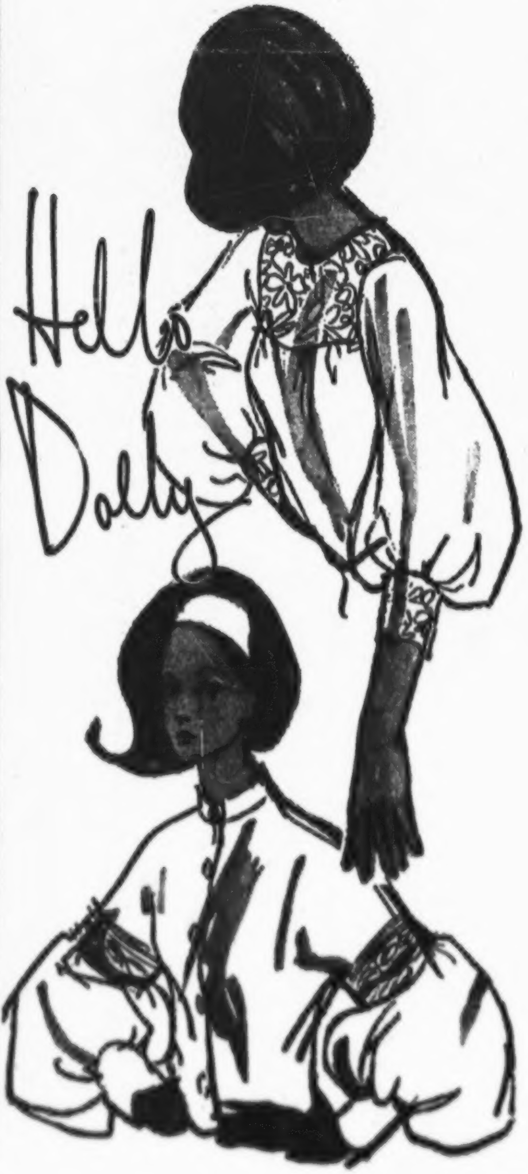
then .... and now



Wine velvet gown at left, from Worth, about 1890, has huge puffed sleeves, diagonally wrapped bodice, flat front and sweeping train in back.

Fig. 197





UNIT VII - SLEEVES

A. Introduction to Sleeves — Lesson 1

OBJECTIVE: To become familiar with sleeve classifications and the names of the various sleeve styles.

RELATED INFORMATION:

Throughout the history of costume, our attention is focused on the silhouette, which changes from year to year. The silhouette is determined chiefly by outlines of skirts and sleeves. Sleeves are always in the fashion news. In the 1890's the leg-o-mutton-sleeve style prevailed, but in that era of ten years it varied from a skimpy top to a voluminous puff. In the 1930's the darted top sleeve prevailed; in the 1940's a smooth sleeve, but a padded shoulder, ranging from tailored squareness to bulging, football shoulders. The 1950's showed a return to the natural shoulder with just enough padding to make tailored garments smooth along the shoulder seam.

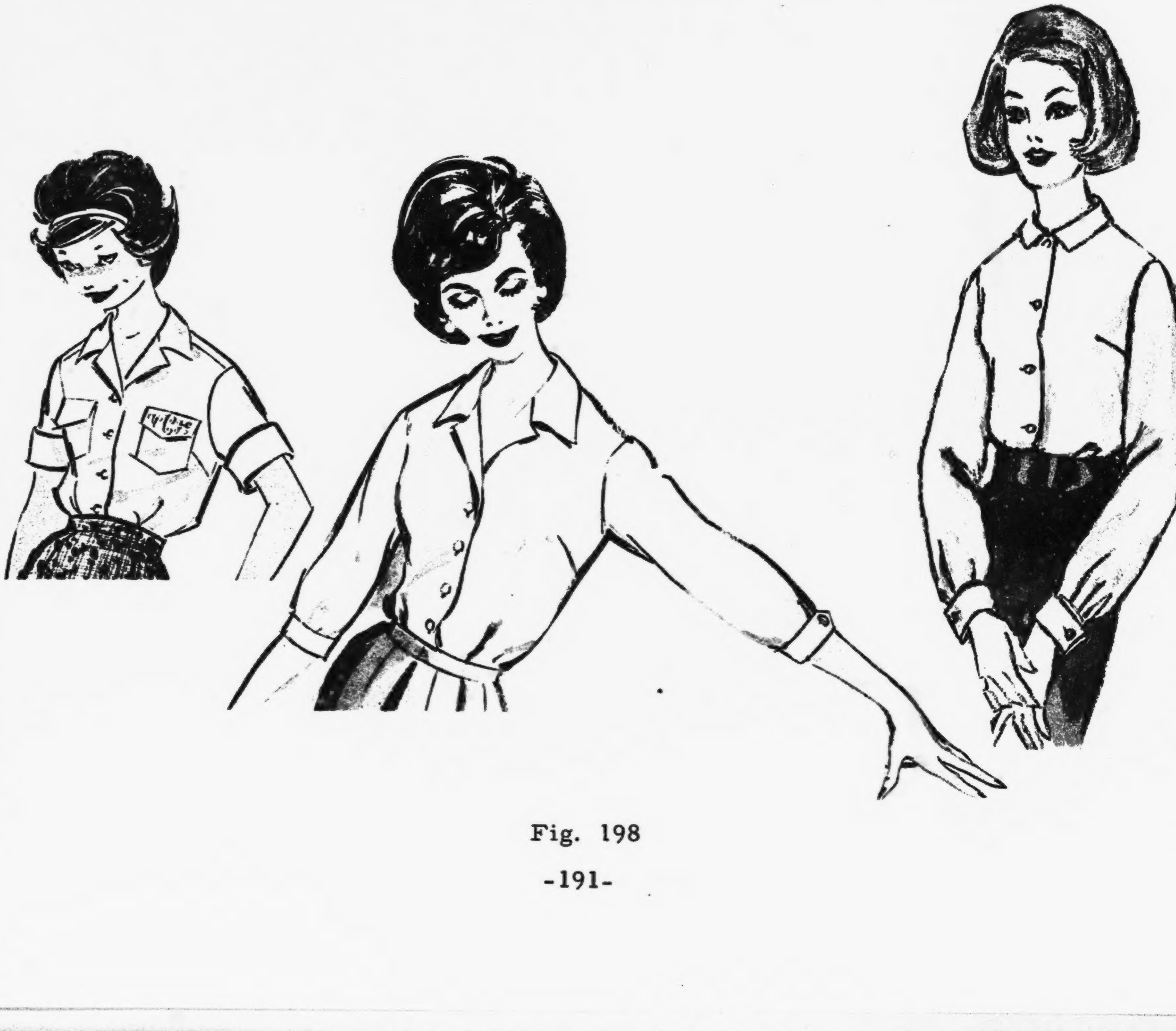


Fig. 198

Sleeves can be dramatic, slim or full, short or long, and do much to change the silhouette. The newness of the sleeve is the fresh approach to line, proportion, and detail. The deep-draped armhole, wide bat-wing cuts, soft puffed sleeves, and long sleeves gathered into a cuff are all expressions of top width through the use of sleeves. Whatever the variation in silhouette, certain basic styles are used every year to suit different occasions, fabrics, and personalities. The length of shoulder seam, the shoulder pad, height of underarm seam are slightly different each year; hence your master pattern will need revising.

There are certain terms in sleeve construction with which you should be familiar, since we refer to them constantly in making the sleeve pattern.

Cap - the curved top of sleeve from front armhole to back armhole.

Ease - additional material allowed in the cap of the basic sleeve, usually $1\frac{1}{2}$ to 2 inches to accommodate the curve and fleshiness or muscle of the upper arm.

Head - the top or cap of sleeve.

Biceps - the large muscle in the front part of the upper arm.

Classification of sleeves

Sleeves are classified as (a) the mounted or set-in sleeve, which is a separate sleeve sewn into the bodice of the garment, and (b) the sleeve-in-one that is part of the bodice. Regardless of the classification, either type of sleeve may be fitted or full or may be cut at any desired length.

Most mounted dress sleeves used by manufacturers are cut in one piece on the straight-of-fabric, that is, the grain of the cloth falls from the top of the shoulder. The same sleeve pattern may be cut on the bias and thus be made tight-fitting yet comfortable.

The various types of mounted sleeves are: (a) sleeve set in the normal armhole; (b) raglan; and (c) sleeves sewn to a drop shoulder.

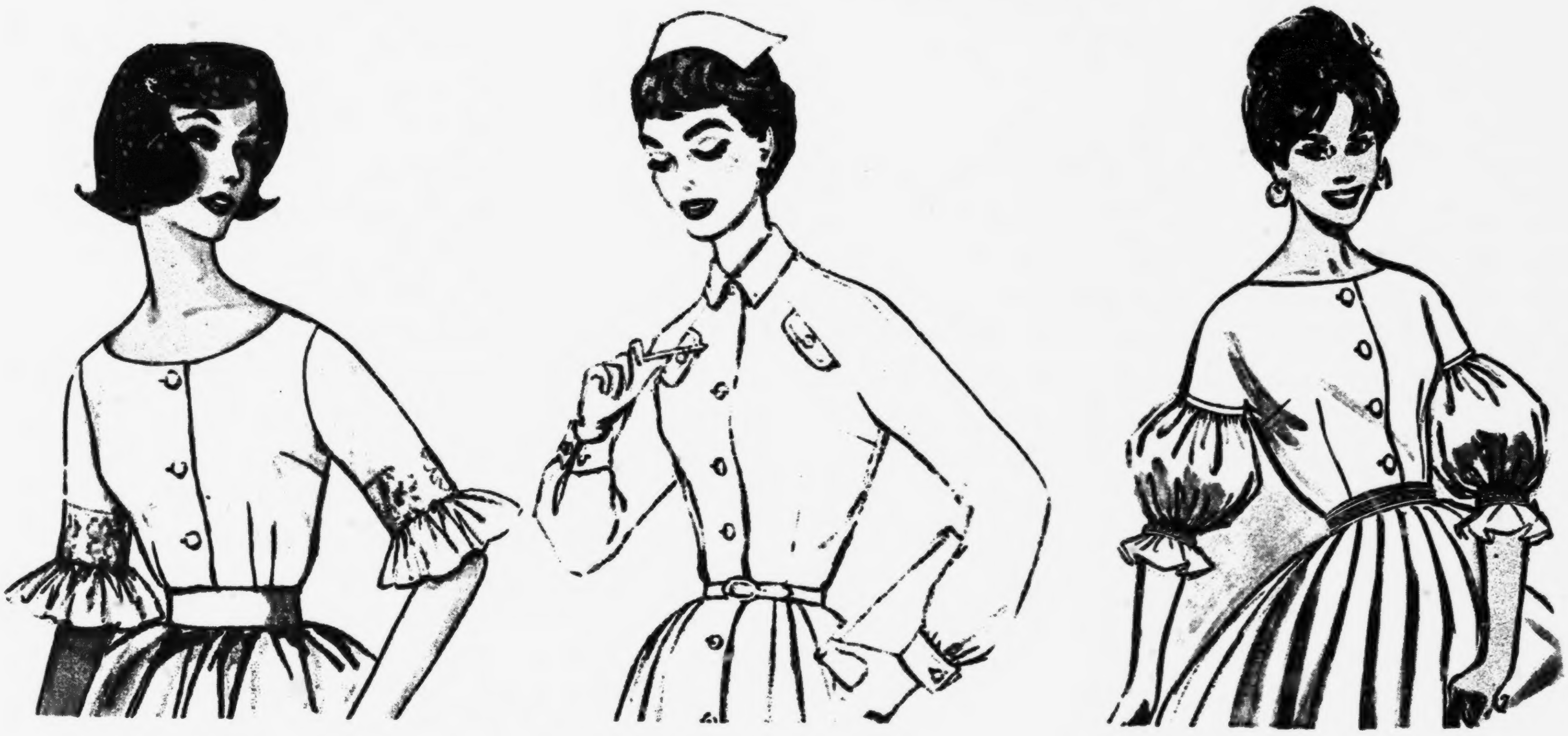


Fig. 198A

Following are a few of the styles of mounted sleeves:

I. Normal armhole

a. Bishop - so named from ecclesiastical vestment, is wide and full, sometimes pleated when of thin material. A band or cuff secures the fabric at the wrist in the bishop sleeve.

b. Bell sleeve - similar in shape to the bishop but is free swinging. The shape is narrow at the top and wide at the bottom.

c. Puffed - a short sleeve gathered at armhole and upper arm, is used mostly in children's wear.

II. Raglan

The raglan sleeve is more frequently used in coats than in dresses. It extends to the neckline in front and back. There are many modifications of this style which are made to look like the raglan sleeve in the front only or in the back only.

III. Drop shoulder

The drop-shoulder sleeve is designed to be sewn in the regular underarm seam but with an extended shoulder or yoke at the cap position. The material needed for the cap of sleeve becomes part of the bodice.

The sleeve-in-one classification may be of two types -- the kimono or the bat-wing. The kimono type sleeve is cut in one with the bodice through both the overarm and underarm sections, retaining none of the original underarm curve. This type therefore gives a soft, loose, draped line around the armhole area. The long-sleeve kimono usually cannot stand the strain of arm movements. To overcome this, a gusset (diamond-shaped piece) is set into the underarm seam. Without the gusset the wearer could not lift her arms very far, but with the gusset, strain is relieved. The gusset also gives the kimono a neat and less bulky appearnace.

The bat-wing sleeve comes to a much lower point on the bodice, producing a very loose effect and allowing much leeway for arm movements.

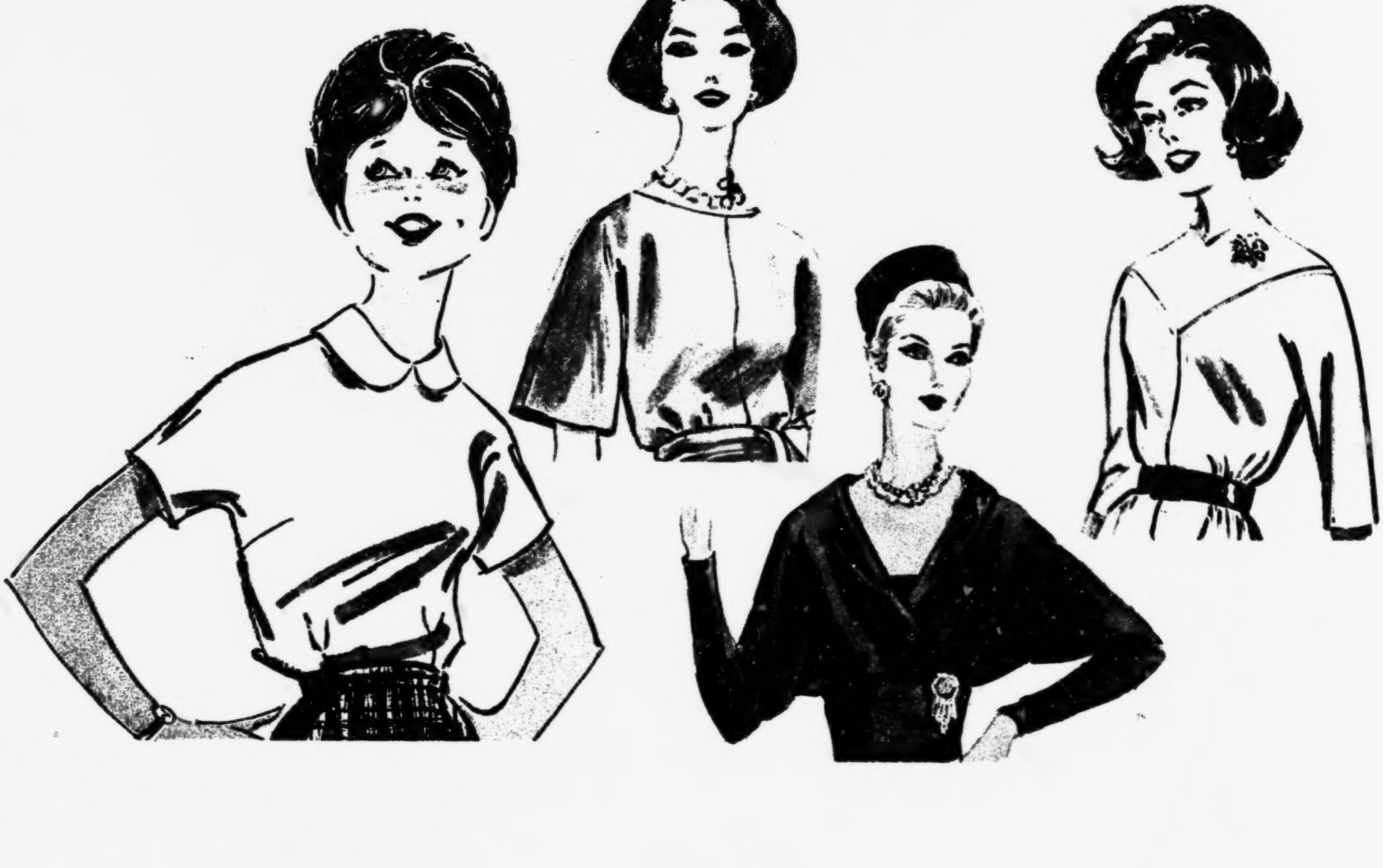


Fig. 199

ASSIGNMENT:

1. Identify the following sleeves as to classification (mounted or cut-in-one).

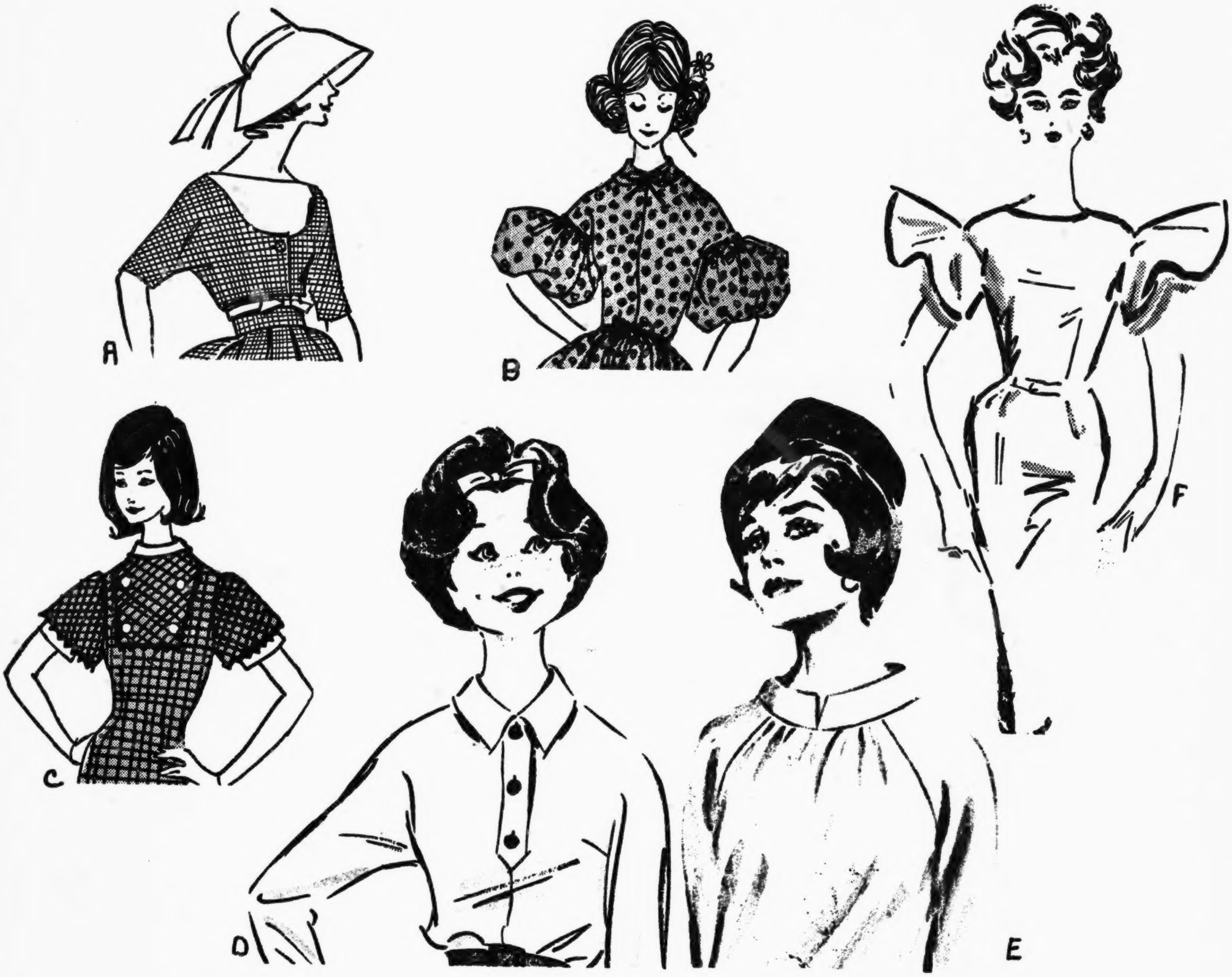


Fig. 200

2. Collect six different styles not covered in this lesson and label each with as specific a name as you know.

3. Design three variations of mounted sleeves. You may use fabric as the style feature.

B. Mounted Sleeves
Set-in Fitted Sleeves Regular Armhole

Lesson 2

OBJECTIVE: To learn to develop fitted set-in sleeves of different lengths.

RELATED INFORMATION:

The set-in sleeve is any sleeve that joins the body of the bodice with a seam at the point where the plane of the shoulder joins the plane of the arm.

While more difficult to handle in sewing than the sleeve all-in-one with the bodice, the set-in sleeve has certain advantages. The sleeve follows the natural hang of the arm while retaining its freedom of movement. There is no bulk at the underarm. Whether short, medium, or long, the set-in sleeve has limitless possibilities for design variations.

The basic sleeve sloper is usually developed by drafting. Allowance is made for ease through the cap of the sleeve, and there is a single dart at the elbow. From it, many different sleeve designs can be devised. For developing the patterns in this unit, use the sloper in Lesson 1 of Unit II.

The sleeve sloper fits the armhole of the bodice front and back, allowing for a little ease at the head. The elbow dart (which will be changed to multiple darts or ease for better styling) helps to adjust the fabric smoothly.

The basic sleeve sloper can be divided into a two-piece sleeve. This fits even more exactly than a one-piece sleeve but is used mainly in tailored garments, suits, and coats.

It is advisable to convert the single elbow dart of the sloper into two or more darts or pleats or to shirr or shrink the fullness out of the sleeve. The one dart tends to give the elbow a pointed look. By using two darts or shrinking out the dart, the elbow area takes on a softer and more rounded appearance.

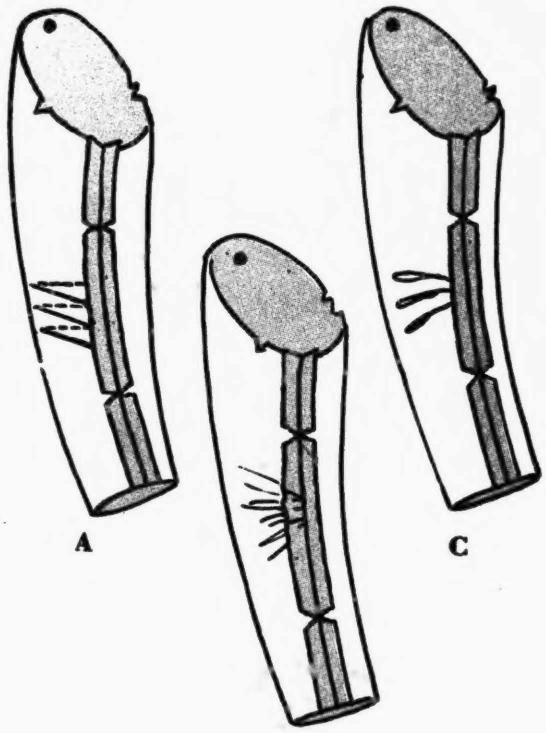


Fig. 201

PROCEDURE:

Example A. Replacing dart with shirring

1. Trace basic sleeve sloper on a new piece of pattern paper.
2. Place notches one inch above and below dart line.
3. Place corresponding notches on other side of sleeve seam. These must correspond with notches in Step 2 from wrist up and from armhole down. The operator will gather the excess material in elbow dart within this notched area.
4. Complete pattern - notches, seam allowance, grainline, etc.

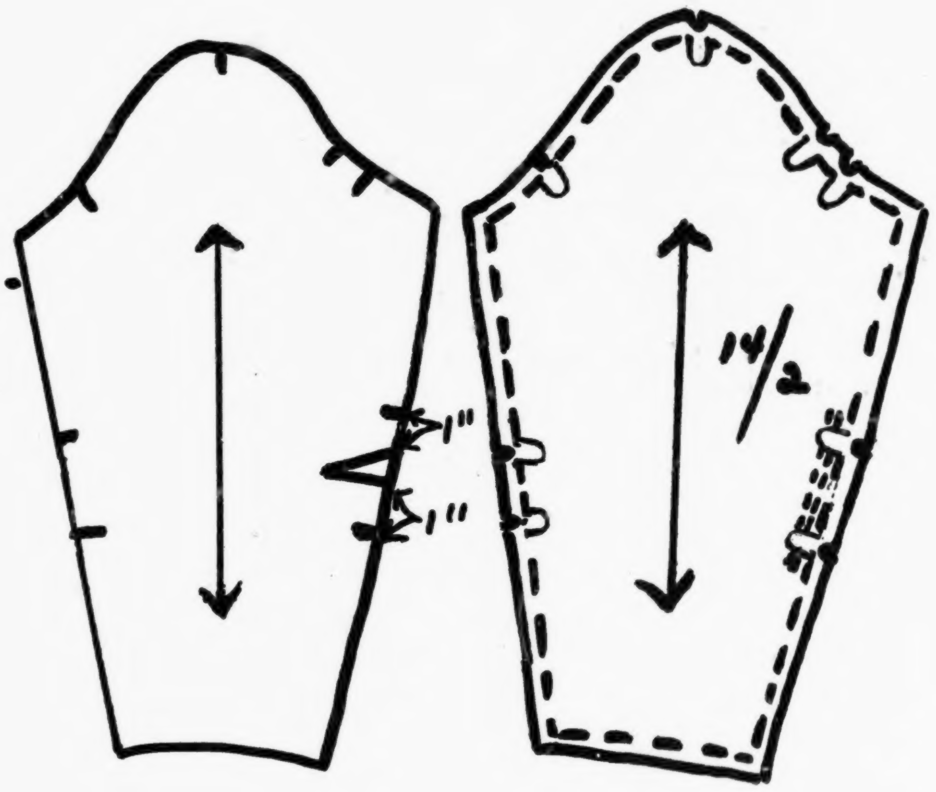


Fig. 202

Example B. Converting elbow dart into two darts

1. Trace basic sleeve sloper on pattern paper.
2. At underarm seam, measure down $\frac{1}{4}$" below elbow line and crossmark. Draw a straight line connecting this crossmark to back fold at elbow line. This becomes the new elbow line.
3. Measure at underarm $\frac{1}{2}$ inch above and below new elbow line. Mark with a dot. These dots mark the inner edges of the new darts.
4. Measure at back fold $\frac{5}{8}$" above and below new dart line. Place dots.
5. Form two darts by measuring above and below the new dart-points a distance equal to one-half of the original sloper dart. Connect the dart points to the dots on the back fold.
6. Close darts and true underarm seam.
7. Complete pattern.

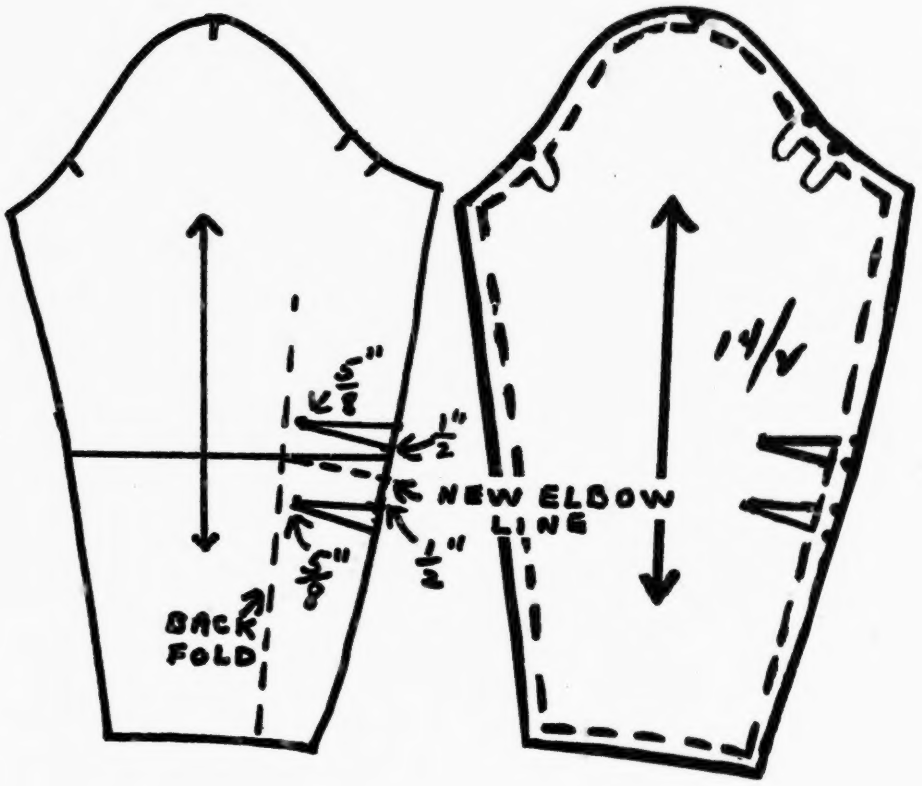


Fig. 203

Example C. Three-quarter length sleeve

The three-quarter sleeve ends between the wrist and the elbow, but there are many fine gradations in length, all of which pass as three-quarter sleeve. Whatever the length, the way to arrive at the pattern is the same.

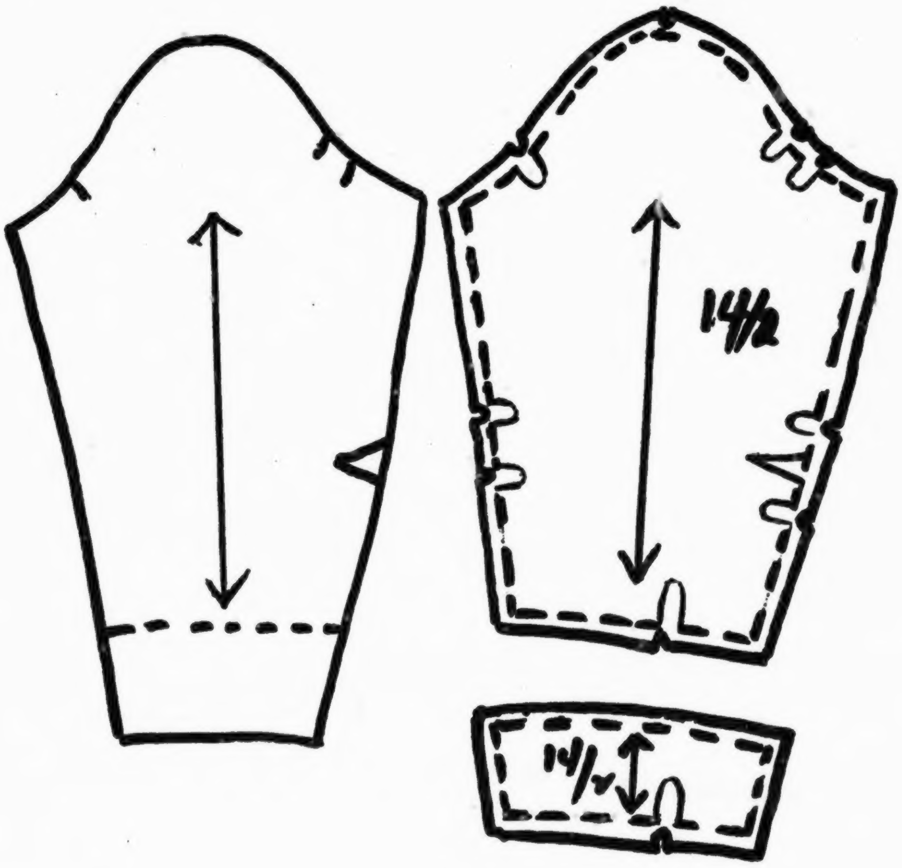


Fig. 204

1. Trace the basic sleeve pattern. Be sure to mark grain and notches.
2. Measure up from the wrist in several places the desired amount.
3. Connect these points with a slightly curved line parallel to the wrist-line.
4. Make the facing for the new-length sleeve.
5. Add seam allowances, notches, and grain. The edge of the sleeve can be used for adding interesting shapes.

Example D. Short fitted sleeve

How short a sleeve is to be varies with the current fashion, the season, and the age of the wearer. The basic sloper sleeve shortened is suitable for casual wear. For a dressier type of garment, a tight-fitting sleeve is much more stylish and flattering.

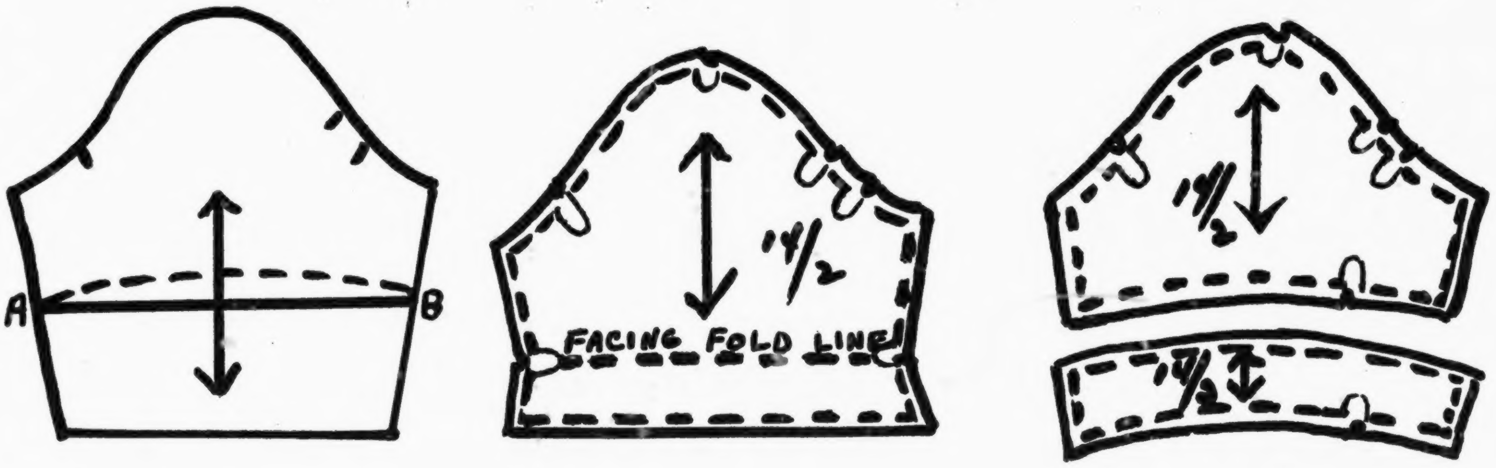


Fig. 205

1. Trace the basic sleeve sloper above the elbow dart. Trace the grainline and notches.
2. Measure down an equal distance from the base of the sleeve cap on both underarm seams---points (A) and (B).
3. Connect (A) and (B) with a straight line. If a curved edge is desired, connect (A) and (B) with a slightly curved line. This will require a separate facing.
4. Add seam allowances, hem facing, notches, and grain.

Note: If the above instructions produce a sleeve which is a little too wide, the width may be reduced by any amount you wish by moving in the underarm seam. (See Fig. 206.)

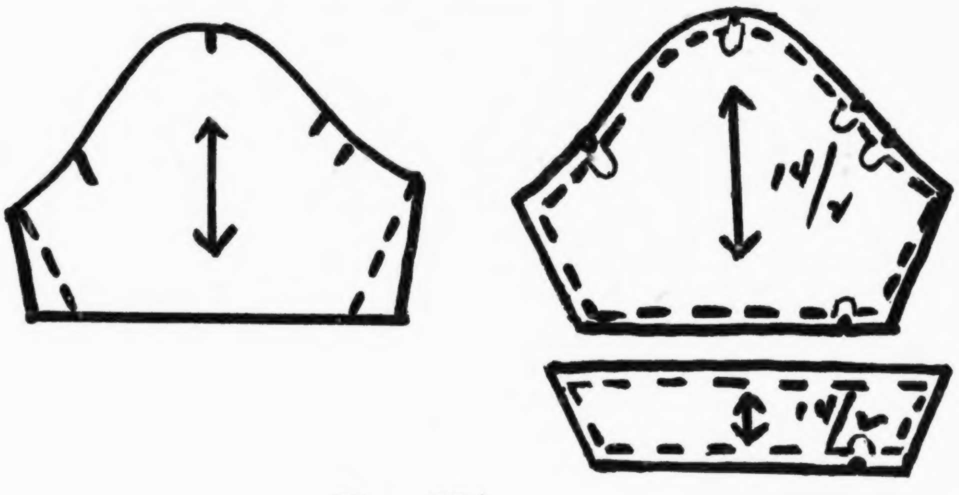


Fig. 206

ASSIGNMENT:

1. Develop all four fitted sleeves.
2. Using the principles of slashing-and-spreading, develop two sleeves with fullness only at the head of the sleeve.

UNIT VII - SLEEVES

B. Mounted Sleeves

Styling Short Set-in Sleeves

Lesson 3

OBJECTIVE: To learn to develop the bell and puffed sleeves in the short length.

RELATED INFORMATION:

Short sleeves provide comfort for activity and warm weather. How short or full varies with the current fashion trend. In cutting sleeves short, measure down from base of sleeve cap the same distance on each side; rule a horizontal line across, parallel with an imagined base of sleeve cap. Short sleeves may be tight fitting as in the previous lesson, straight, as in a tailored roll-up, or full either at cap or at the bottom.

The correct length of sleeve must be planned before working on style details. The sleeve edge may be shaped into scallops, notches, or slits for style interest. These shaped edges and any circular edge require separate facings.

More width can be added to the cap line of the sleeve as well as to the bottom, if desired, by spreading the pieces along a straight line. The pieces can also be spread so that more fullness is added to the bottom than to the cap.

1. If bulk is at the lower edge only, it adds width to the silhouette on a level with the bust.

2. Fullness at armhole and lower edge gives a feeling of width at the shoulders as well as on a level with the bust or just above it.

3. Fullness at armhole edge only directs the eye to the shoulder level only. By contrast the exposed arm below will appear to take on a slimmer appearance. A little extra width carefully used near the shoulder may offset or balance wide hips.

Extra length can be added if more of a puffed effect is wanted when the sleeve is gathered.

PROCEDURE:

Example A. Bell sleeve with a smooth shoulder

The bell sleeve may be gathered at the shoulder or left with a smooth cap. Fullness in sleeves is obtained by the same technique of slashing and spreading as used in bodices.

Circularity or ripple as in the bell sleeve is added by slashing from the bottom to the top and spreading.

This pattern can be gathered at the bottom into a band.

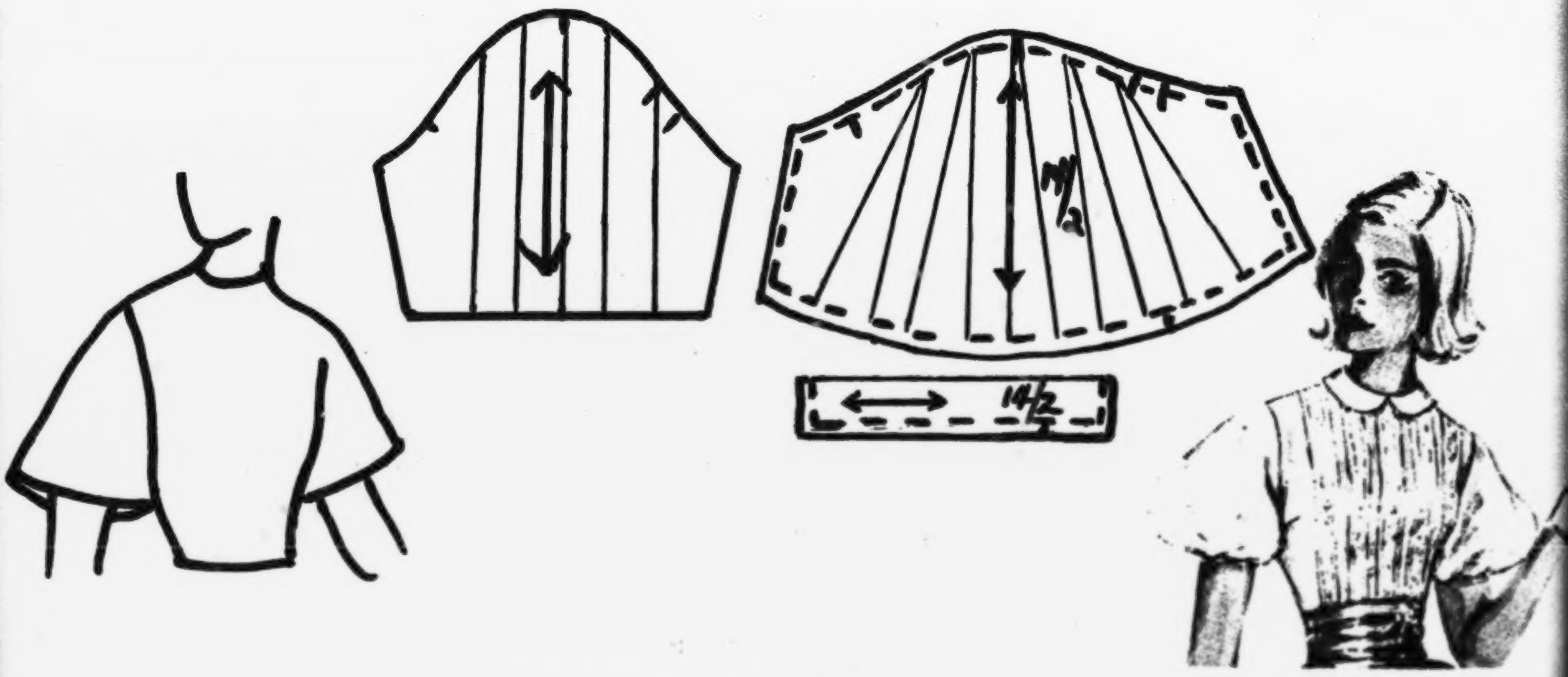


Fig. 207

Example B. Sleeve with fullness at the cap

Gathers at the top only are obtained by slashing from the top to the style line of the short sleeve and spreading. The amount of fullness depends upon the fabric and the style desired.

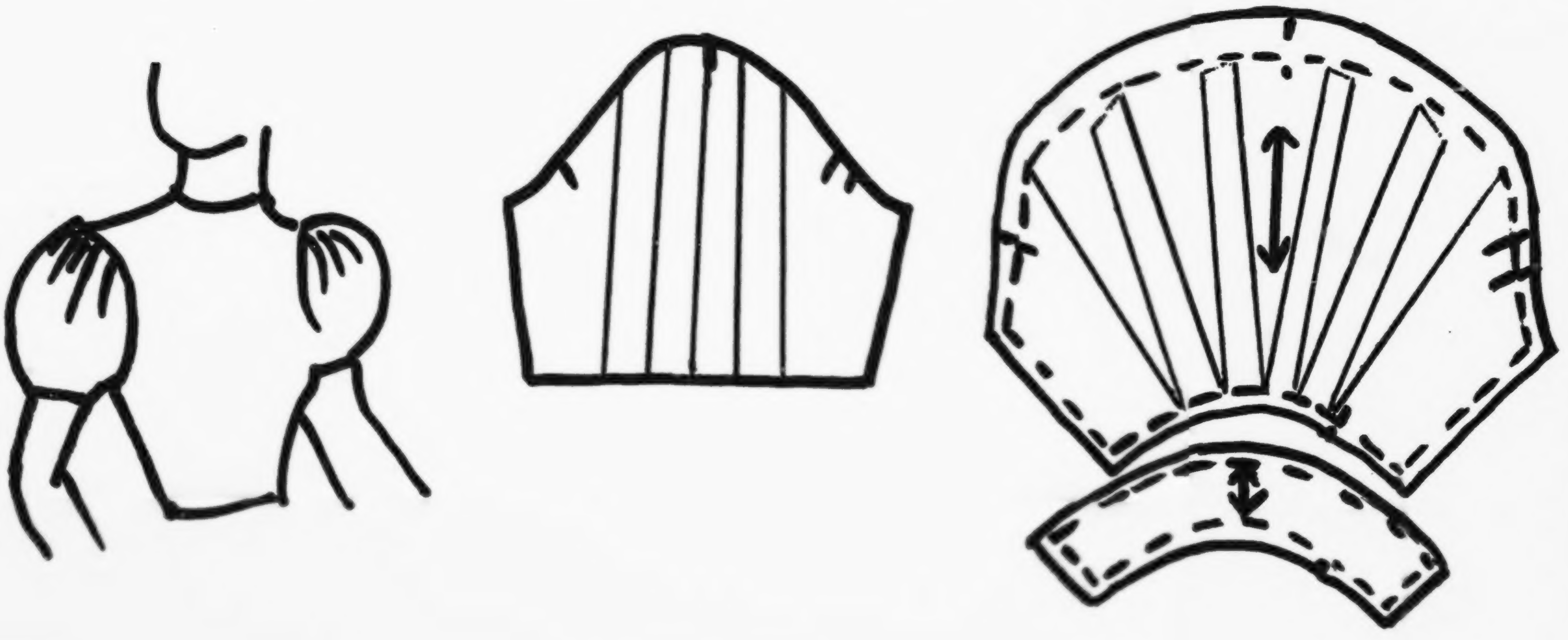


Fig. 208

The short, puffed sleeve has a youthful character, so it is the choice for children and young girls. When fullness is added above the elbow, the most pleasing effect is achieved by making the center of the sleeve the center of interest. Therefore, in order to produce a satisfactory horizontal grain across the sleeve, we add extra material to the back of the sleeve, tapering out from the back fold to both seam edges.

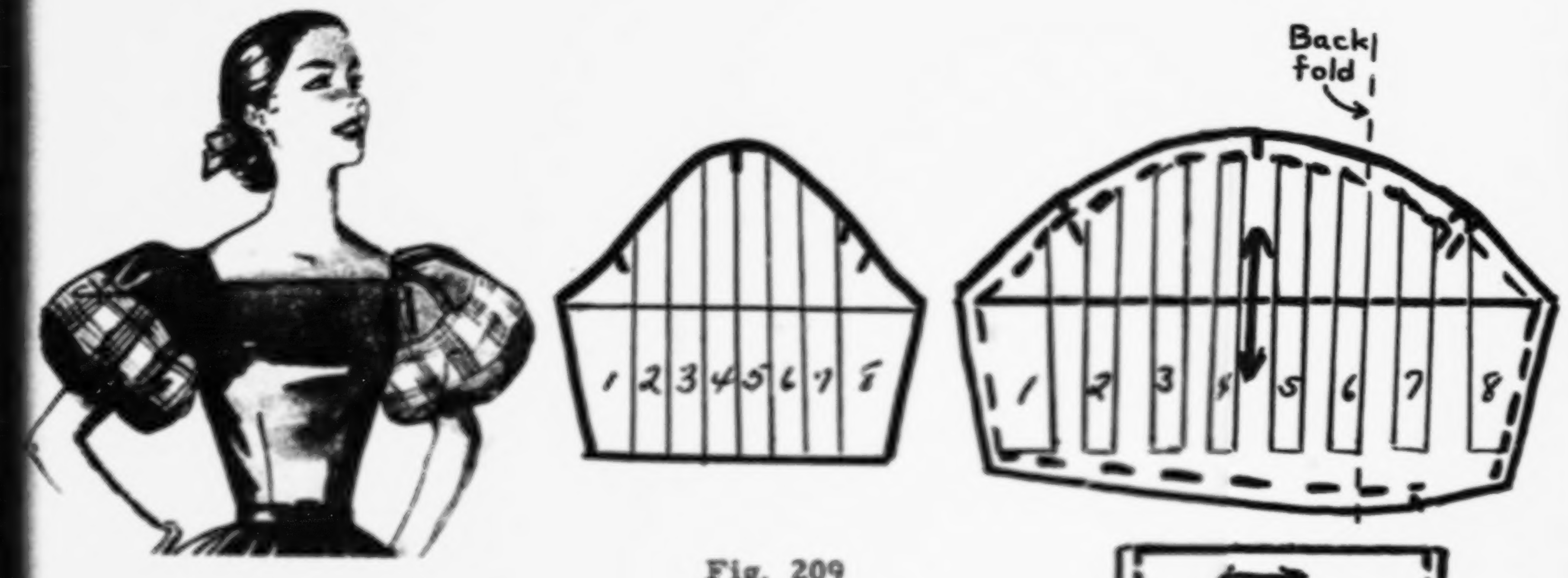


Fig. 209

ASSIGNMENT:

1. Duplicate patterns for sleeves A, B, and C.
2. Collect six pictures of different short sleeves and develop three of the patterns.

UNIT VII - SLEEVES

B. Mounted Sleeves

Styling Long Set-in Sleeves — Lesson 4

OBJECTIVES: To learn how to develop patterns of sleeves with fullness. To become familiar with the bell, bishop, peasant, and shirtwaist sleeve.

RELATED INFORMATION:

The set-in sleeve may be designed with fullness either at top or bottom or both. Sleeves with fullness at the bottom may be left free at the wrist, as in the bell sleeve, or the additional fullness at the bottom may be gathered into a wrist band as in the shirtwaist and bishop sleeves.

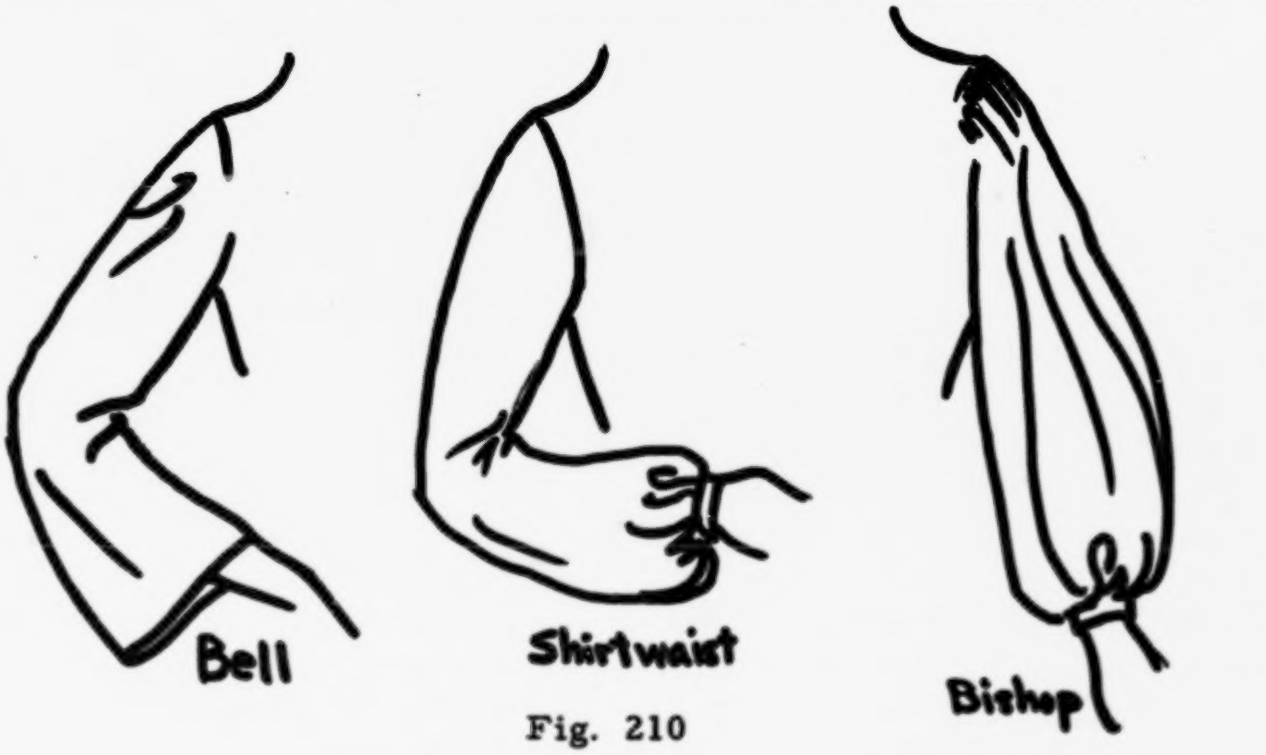


Fig. 210

The leg-o-mutton sleeve (Fig. 196) is full at the upper arm and tight from elbow to wrist. The emphasis on top width, through broadened bodices and wide, puffy sleeves, and the shirtwaist dress of the 1890's (the Gibson Girl era) are repeated time and time again in fashion.

In the designing of full sleeves, the principles of slashing-and-spreading apply. More width can be added to either the cap line or the bottom line of the sleeve by slashing and spreading the pieces in the direction of the desired fullness.

These sleeves may be three-quarter or full length. Any long, loose sleeve that is gathered into a wristband should be cut long enough to blouse slightly, so that when the arm is extended the sleeve will not pull taut. A trim, snug wristline for long sleeves, or a neat three-quarter sleeve, keeps the silhouette compact. Wide, full sleeves at waist or hip level add that much to the silhouette. The peasant, bishop, or bell sleeves are more casual and graceful than the long tight-fitting sleeve.

PROCEDURE:

Example A. Shirtwaist sleeve

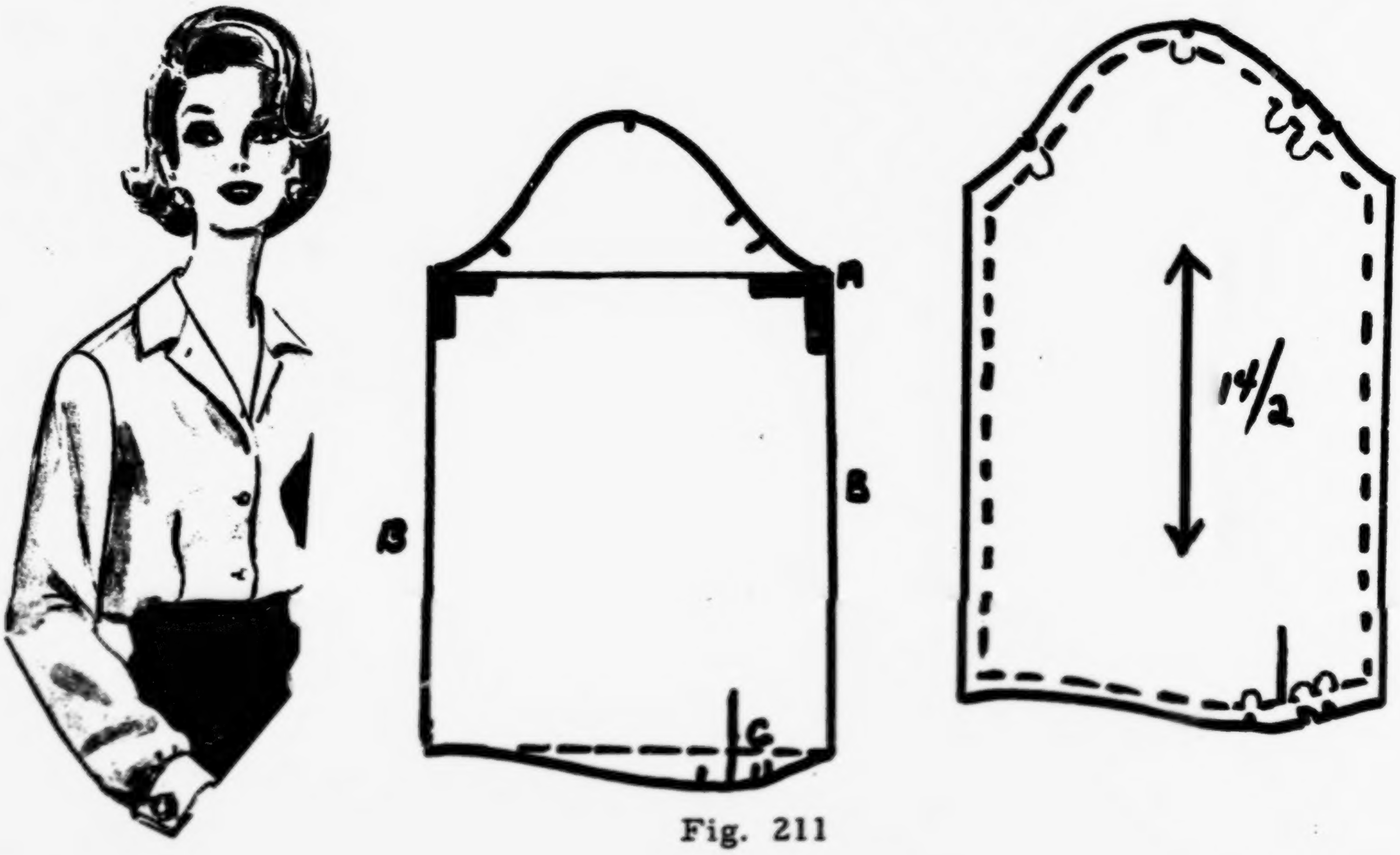


Fig. 211

1. Trace cap of basic sleeve sloper.
2. Draw in biceps line (A).
3. Square two lines from biceps line equal to the length of the sleeve (B).
4. Connect the ends of the two lines.
5. To allow for room at the elbow, the sleeve must be shaped slightly longer at the back. To do this, divide the sleeve bottom into quarters. At the first division of sleeve at the back, place a crossmark for the placket opening and for drop of sleeve (C).
6. Draw a line 1$\frac{3}{4}$" long at the back of sleeve at crossmark (C).
7. Blend bottom line of sleeve from nothing at seam, around the drop (C) to nothing to opposite seam. The widest part of the drop, at C, can be anywhere between 1 and 3 inches, depending upon fabric and fullness desired.
8. The entire length of the opening usually measures 2 to 3 inches. A continuous placket of bias, or facing, is used to finish the slit.
9. Place a double notch along the waist edge at the back of sleeve-placket opening and a single notch in front of it.
10. Complete pattern, seam allowance, notches, grain, etc.

Example B. Wristband for shirtwaist sleeve

A straight band is generally used to finish both a long, shirt-type sleeve and a full, gathered sleeve. It may be varied in many ways: the ends may be straight and finished with buttonholes and links; it may be shaped at one end and buttoned over the other; or the band may be cut twice the usual width, folded lengthwise through the center and turned back to give the effect of a French cuff (a double cuff). The type chosen depends largely upon the particular effect desired. If a band or cuff is more than 2½" wide, it should be shaped to fit the wrist.

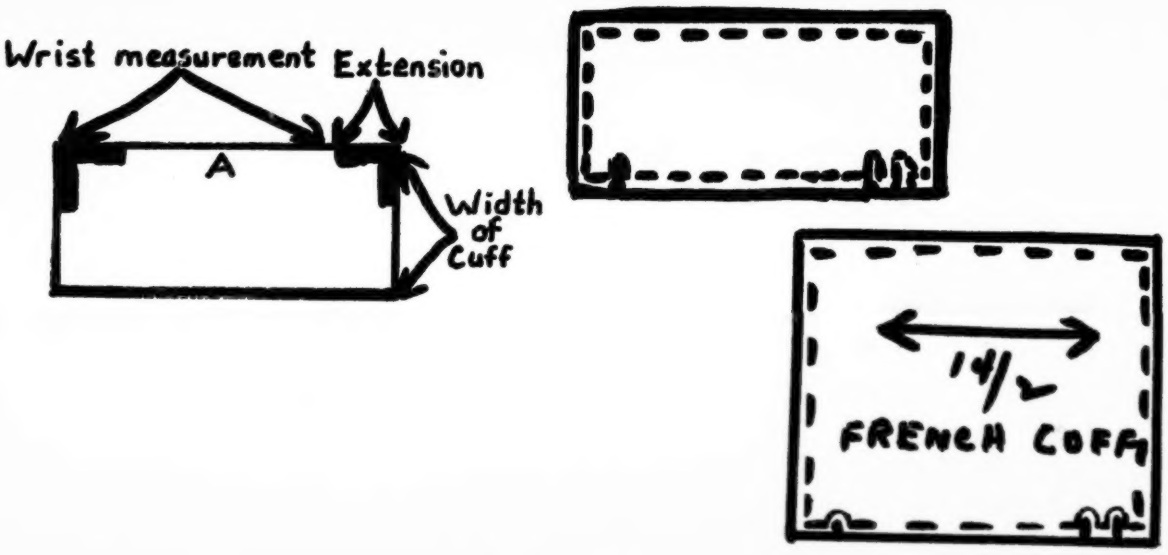


Fig. 212

1. Measure the bottom of basic sleeve sloper to obtain wrist measurement.
2. Add to this measurement ½" to 1" for ease, plus one inch for an extension. (The extension is placed at the back of the sleeve.)
3. Draw a line the complete measurement of wrist, plus ease and extension (A).
4. The width of a straight band is usually one inch, and it is made double. Square a 2-inch line from line (A) at each end.
5. Connect the two ends.
6. Add seam allowance, grain, and notches.
   (The lengthwise grain is parallel to the complete measurement of the cuff.)

ASSIGNMENT:

1. Develop pattern for shirtwaist sleeve and wristband. Develop pattern for a French cuff (double cuff).

2. Additional fullness is created by the slash-and-spread method. Study the slash-and-spread lines in the following illustrations and develop the patterns for the full bishop and the bell sleeves.

Full Bishop

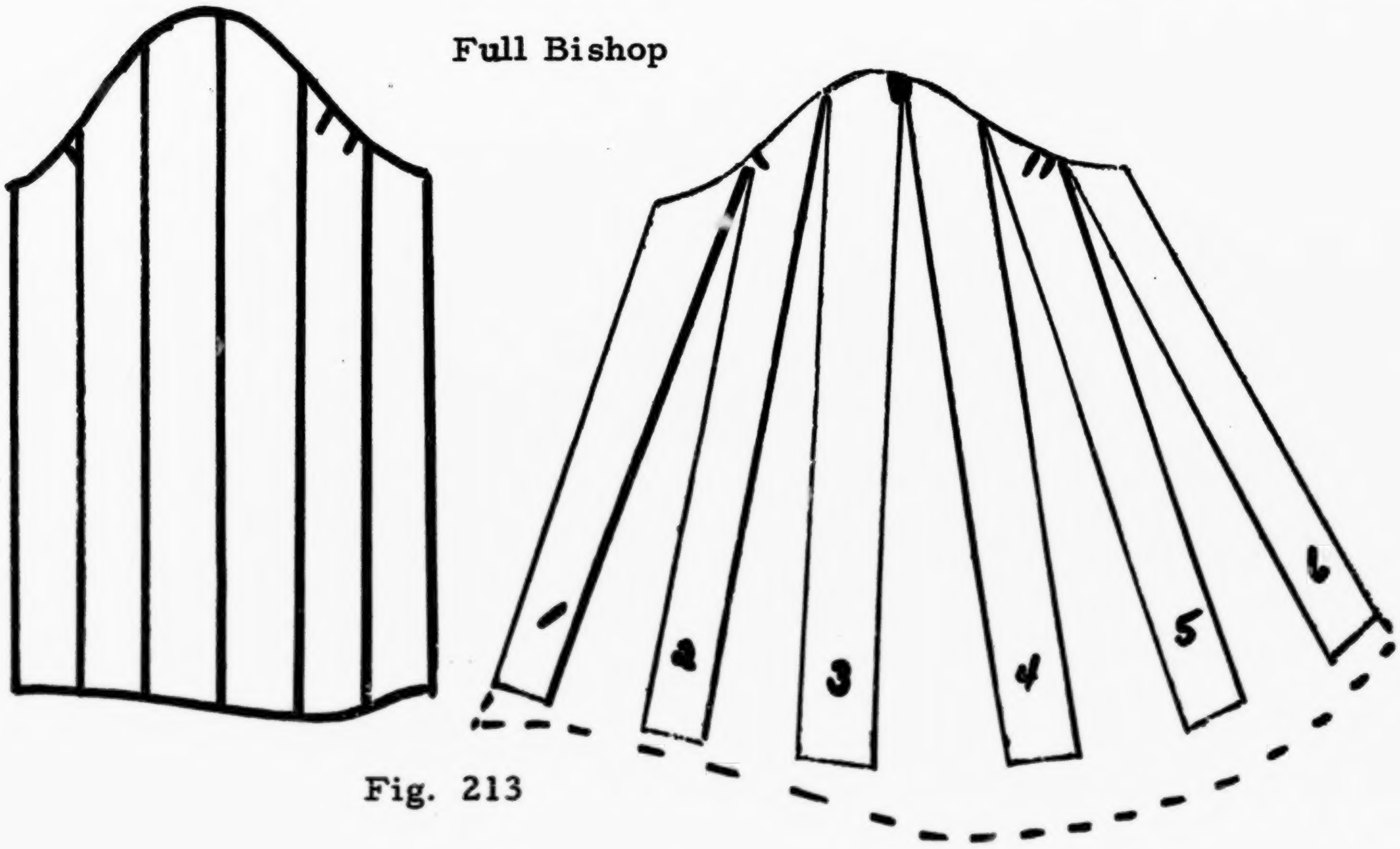


Fig. 213

Bell Sleeve

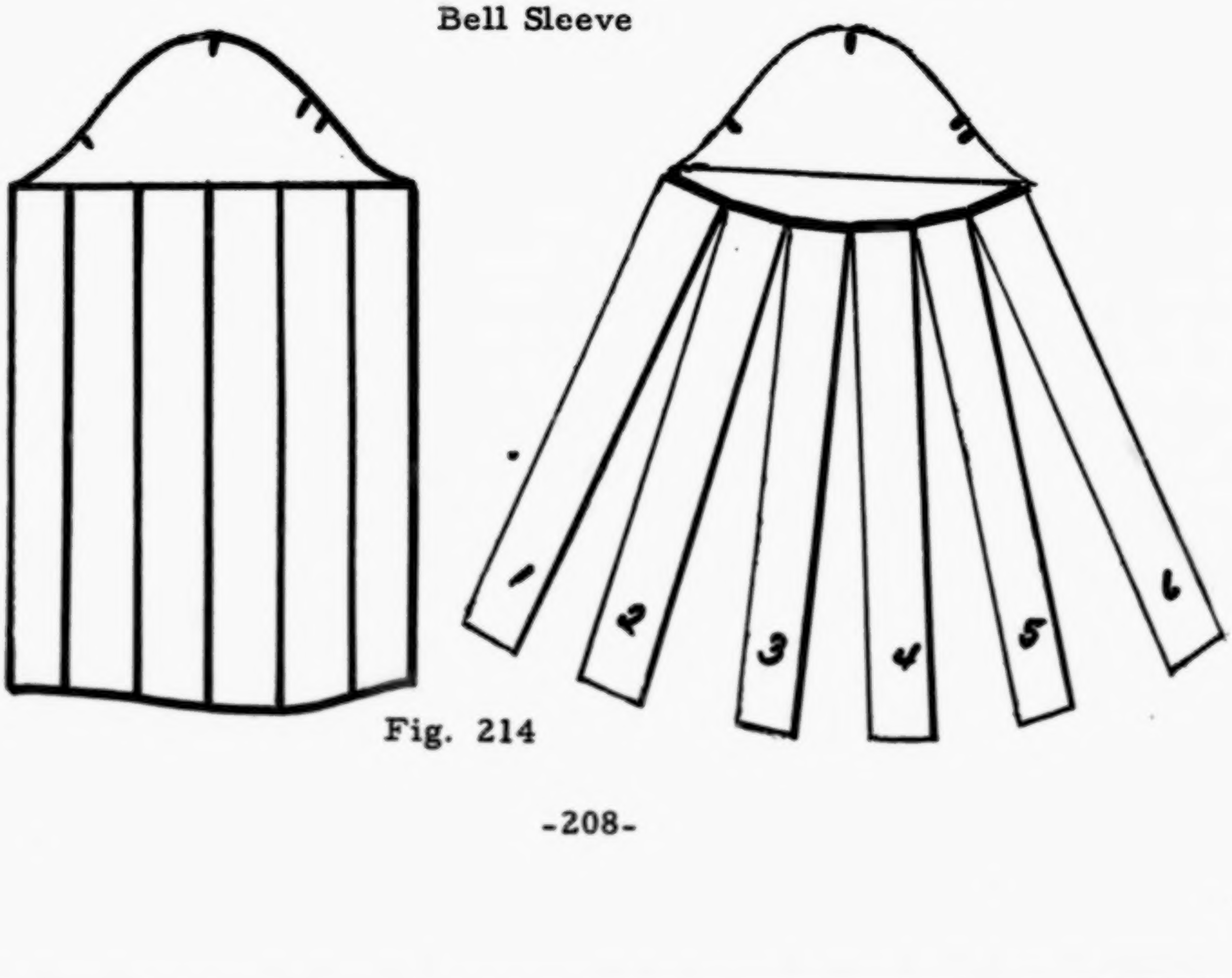


Fig. 214

C. Sleeveless Bodice

Lesson 5

OBJECTIVES: To learn the rules for styling dresses without sleeves.

To learn how to develop facing patterns for sleeveless dresses.

RELATED INFORMATION:

In the late 1950's and early 60's, the "bared" look became the focal point for designer's collections of city dresses. (The day when a sleeveless dress wasn't proper in town was left far behind.)

In a set-in sleeve the armscye is deep enough to provide ease of movement. This is not necessary where there is no sleeve. The deep armscye exposes too much of the armpit areas, never particularly noted for its beauty. In some cases it may even expose the lingerie.

In the sleeveless bodice the armhole may need raising, or it may be reshaped into a curve, square, or point. The facing may be top-stitched; the facing and garment bound with braid or ribbon; or the facing may be turned to the right side for a decorative effect. Usually a slight extension of the shoulder into a cap shape gives a more finished, less naked look.

PROCEDURE:

Example A. Separate facings for front and back armhole

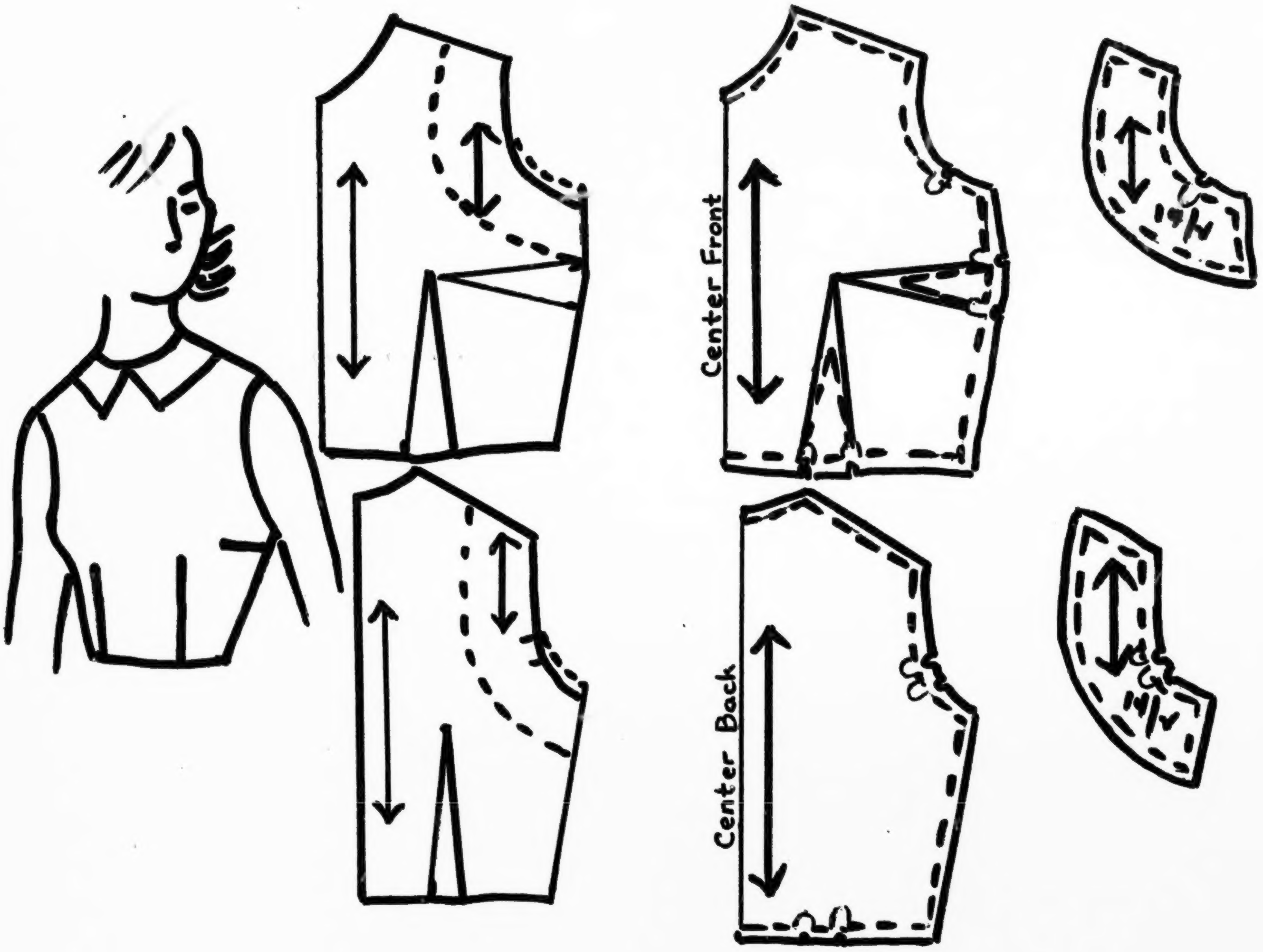


Fig. 215

1. Trace front and back bodice slopers.
2. Raise the armscye $\frac{1}{2}$ inch at underarm to nothing at center of armhole (both back and front).
3. Mark off facing (at least 2 inches) around armhole, back and front.
4. Trace complete new bodices and add seam allowances.
5. Trace fit line and outside of facings -- add seam allowances at fit line, shoulder and underarm.
6. Mark grain lines and notches.

Example B. Complete armhole facing for back and front

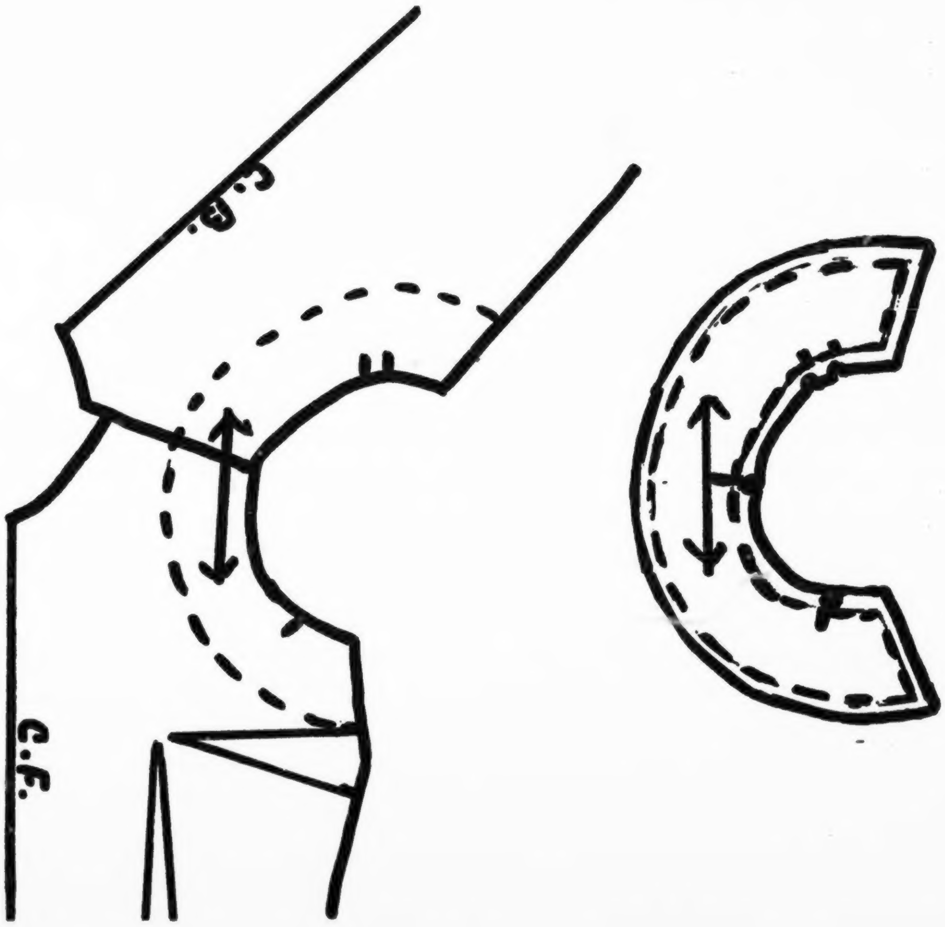


Fig. 216

1. Using bodice patterns developed in A, place back and front shoulders together, matching at armhole.
2. Mark off armhole facing 2 inches from outside edge.
3. Trace armhole facing, add seam allowances, notches, and grain. (Be sure to place notch at shoulder position.)

ASSIGNMENT:

1. Develop both patterns, A and B.

2. Style three different armholes and make a complete pattern of bodice and facing for each.

3. Develop one of the styles in (2) above, in any cotton fabric.

D. Sleeve-in-One With the Bodice
Extended Shoulder - Modified Cap

Lesson 6

OBJECTIVE: To learn how to extend the shoulder of the basic sloper.

RELATED INFORMATION:

The extended or modified cap is the simplest design in the sleeve-in-one classification. This sleeve has the good features of both the cap sleeve and the sleeveless dress. The style line of the upper portion gives the effect of a cap, while the lower portion retains the freedom of movement of the sleeveless dress. This eliminates the area of strain in the cap sleeve.

The sleeveless dress is not just one with the sleeves left out. For some figures it looks better when the shoulder line is slightly extended beyond the normal armhole for the set-in sleeve. The extended shoulder comes into the class of cap sleeves. The cap sleeve or extended shoulder is a very short version of the kimono sleeve.

PROCEDURE:

Example A. Extended shoulder

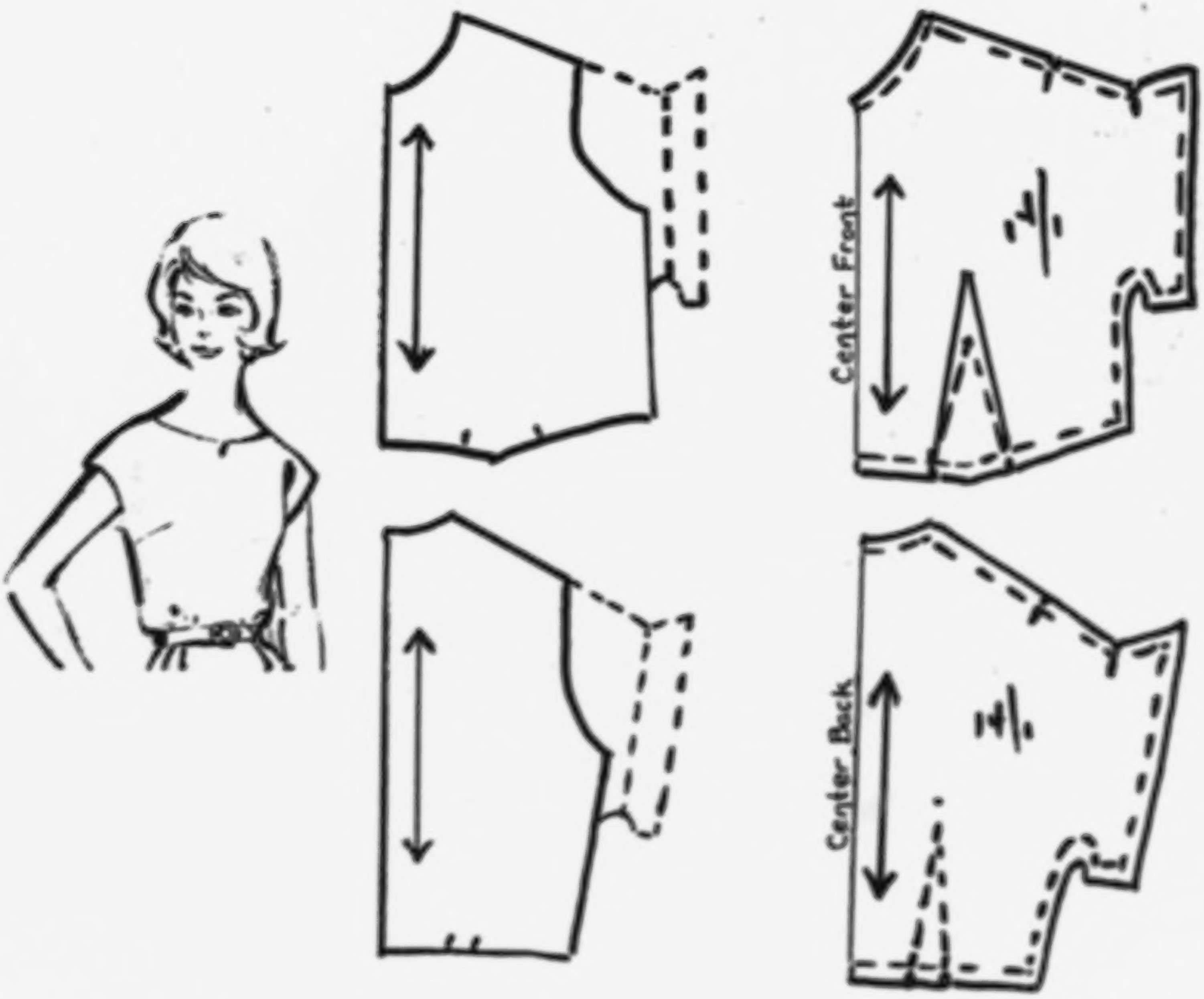


Fig. 217

1. Trace the bodice front and bodice back slopers, using the proper dart positions.
2. On the front bodice, extend the shoulder out to the desired length of the cap.
3. Lower the armhole at side seam one to two inches.
4. Make a curved line from the lowered armhole ½ inch out.
5. Connect the extended shoulder to the lowered armhole.
6. Add 1¼ inches for an attached facing from new armhole line.
7. Fold the facing back on style line for armhole and trace shoulder and underarm to get proper shaping of facing.
8. Add seam allowances, notches, grain.
9. Do the same for the back bodice pattern.

Example B. Modified cap sleeve

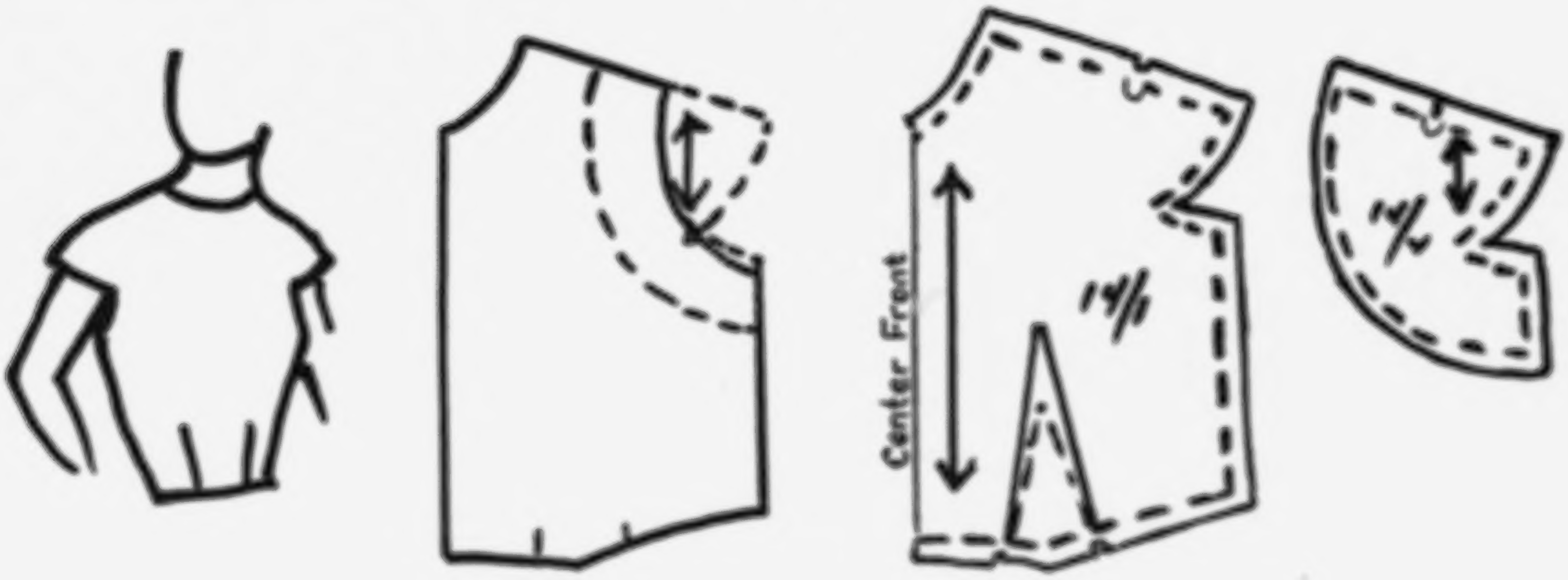


Fig. 218

1. Duplicate Steps 1 and 2 in (A).
2. Raise the armhole as for the sleeveless dress inprevious lesson.
3. Draw the style line of the cap, bringing it to the raised armhole at the sleeve notch.
4. Mark out facing for cap and armhole.
5. Trace final patterns of bodice and facings.
6. Do the same for the back bodice pattern.
7. Add seam allowances, notches, grain.

ASSIGNMENT:

1. Duplicate both sleeves, A and B.

2. Duplicate sleeve B in fabric.

3. Collect six pictures of garments using the extended shoulder or cap sleeves.

UNIT VII - SLEEVES

D. Sleeve-in-One With the Bodice
Short Kimono Sleeve Lesson 7

OBJECTIVES: To learn to develop the short kimono sleeve.

To understand the important rules in the development of a kimono sleeve.

RELATED INFORMATION:

The kimono sleeve originated in the Japanese kimono. The primitive kimono was made of rectangles of material stitched together. The sleeve and shoulder line were placed at right angles to the center front and center back as shown:

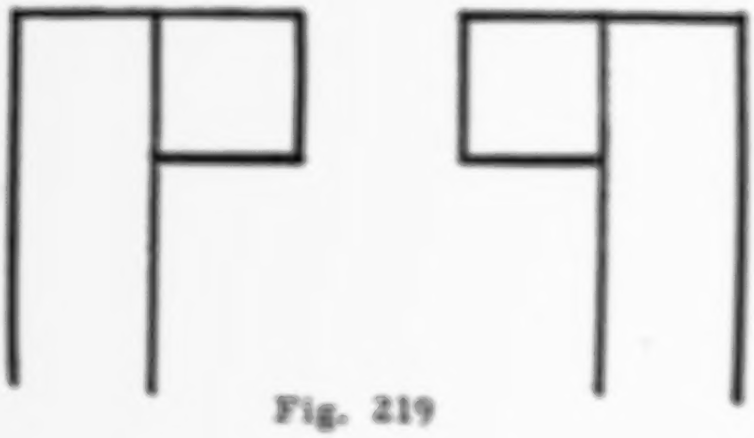


Fig. 219

The rectangular construction of the kimono had one big drawback. When the arms were at the side, there was considerable wrinking under the arm. To correct this, the kimono sleeve is now designed at an angle that will bring it into a more natural arm position. A two-seaned sleeve, which has one seam on the top of the shoulder extending from the neckline to the end of the sleeve and the other seam extending from the waist down the length of the sleeve, gives the garment a better fit. However, what this sleeve gains in naturalness it loses in freedom of movement. To correct this defect, a gusset is added to the underarm of kimono sleeves that are tight fitting. The gusset prevents underarms of kimono-style sleeves from drawing and tearing out.

The kimono sleeve is easy to make, requires very little fitting, and is best suited to soft fabrics which have sufficient body to hangwell. The sleeve may be of any length. However, the longer the sleeve the more it will pull, and the more necessary the gusset becomes.

PROCEDURE:

Example A. Short kimono sleeve - two-piece sleeve

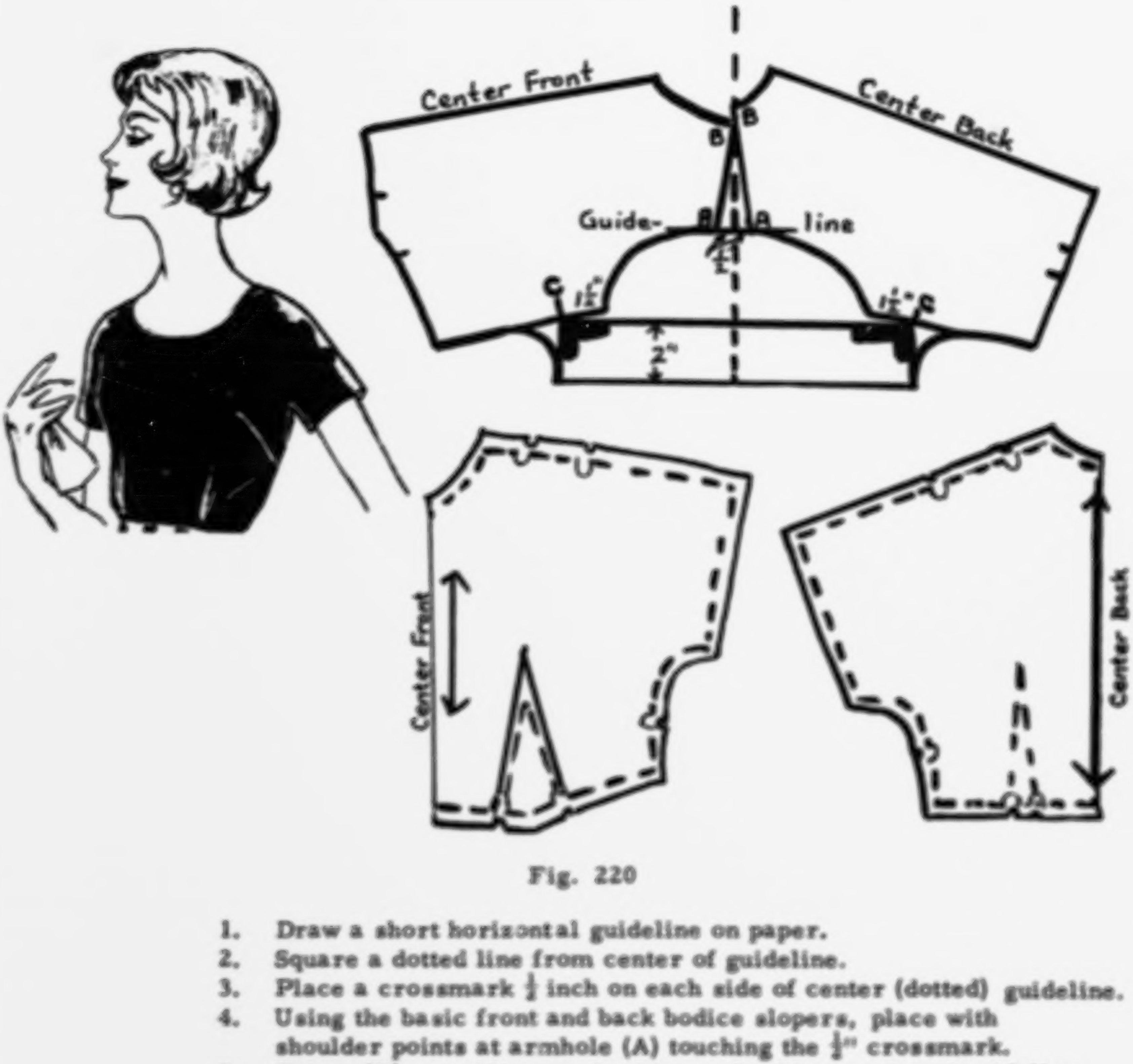


Fig. 220

1. Draw a short horizontal guideline on paper.
2. Square a dotted line from center of guideline.
3. Place a crossmark ½ inch on each side of center (dotted) guideline.
4. Using the basic front and back bodice slopers, place with shoulder points at armhole (A) touching the ½" crossmark.
5. Points (B) - neckline at shoulder - should meet dotted guideline.
6. Mark off 1½ inches on side seams of back and front slopers from armhole position (C). Connect the two points (CC).
7. Using your square, at each point (C) measure off 2 inches. Connect these extensions with a line parallel to CC. This will form the length of the sleeve.
8. Curve the line from the side of bodice back and front to new sleeve length.
9. Extend dotted guideline through rest of sleeve.
10. Trace front and back, separating them at shoulder guide line.
11. Add seam allowances, notches, and grain line.

Example B. Short kimono sleeve - back and front in one piece

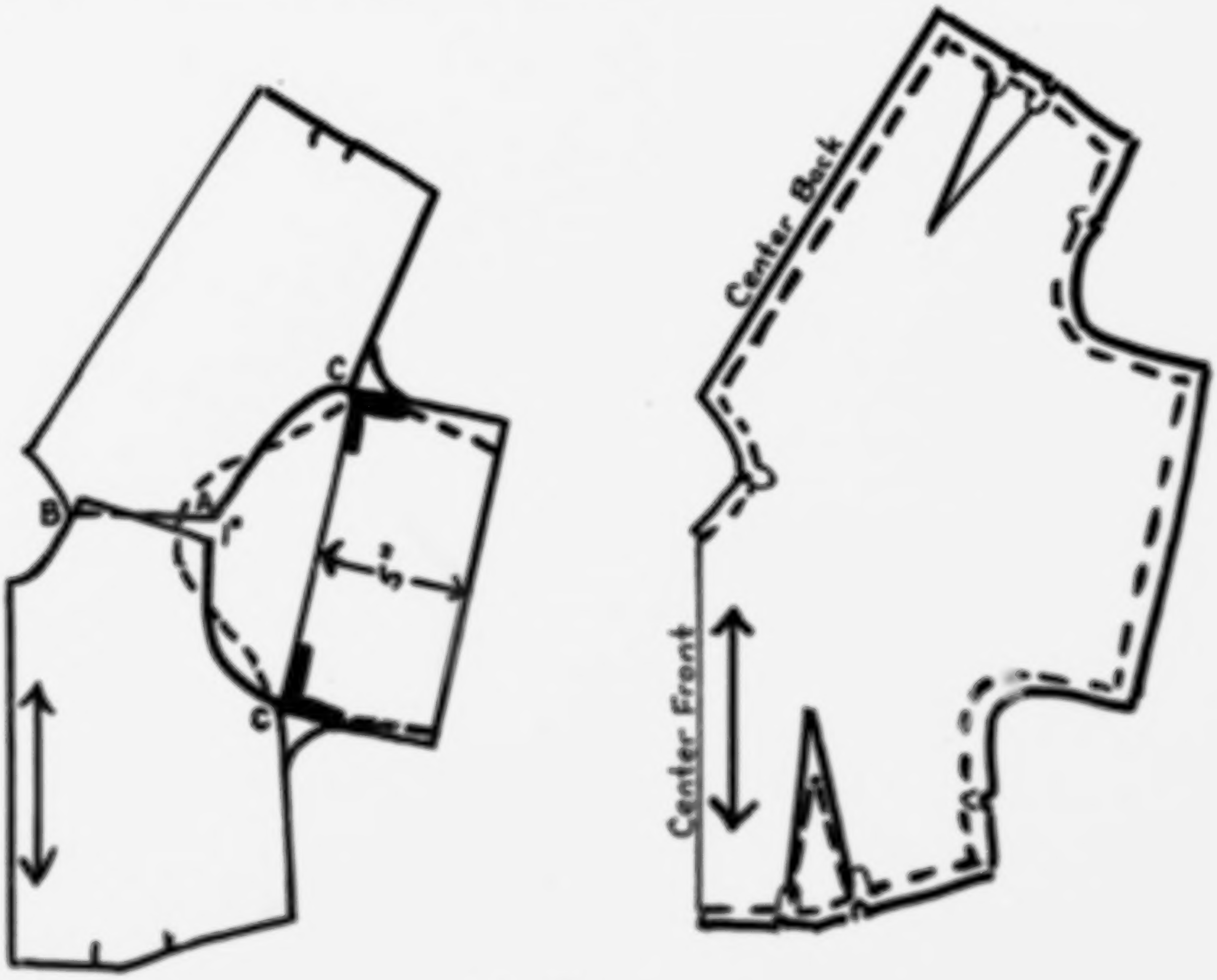


Fig. 221

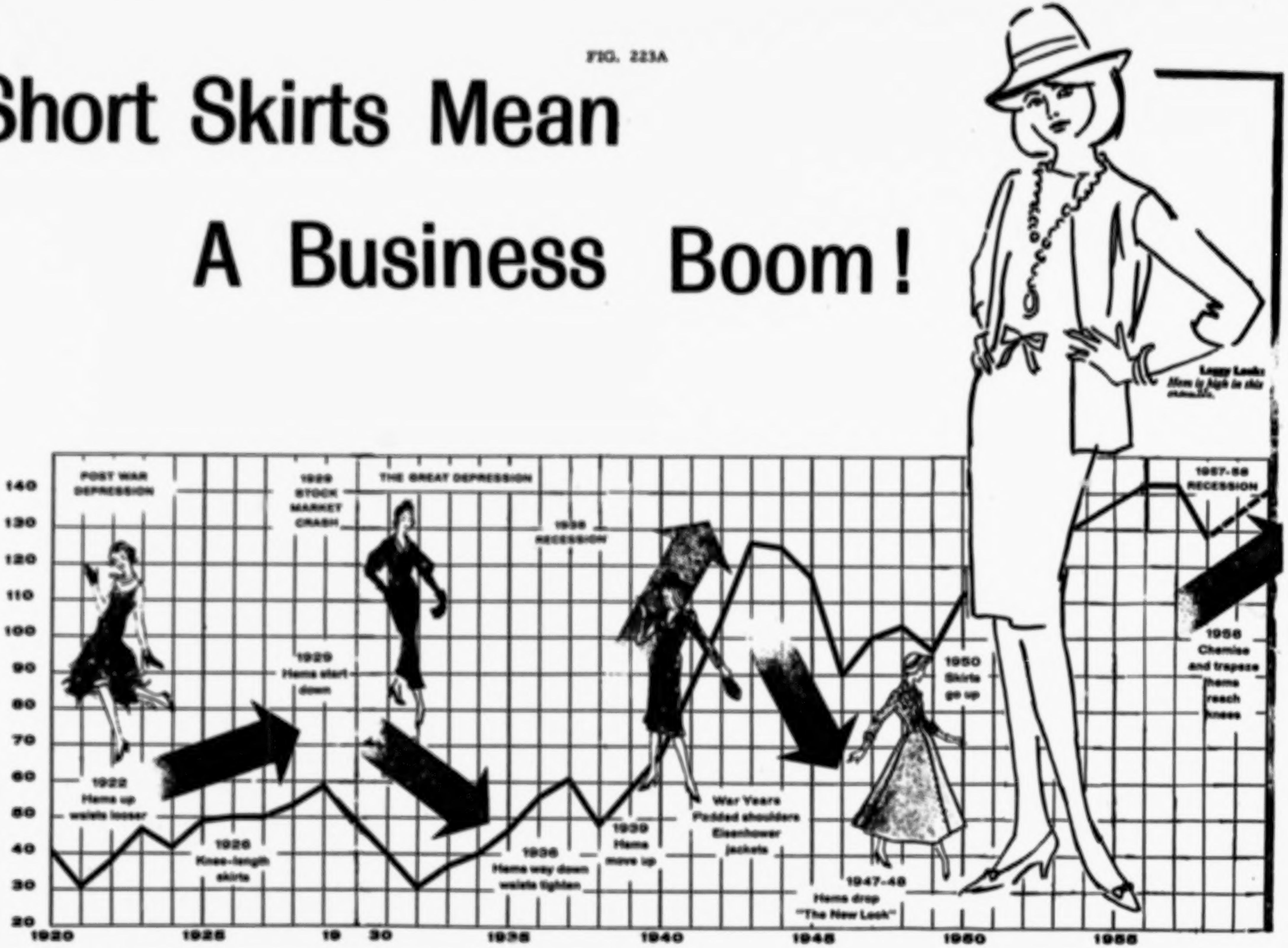
1. Trace front bodice sloper.
2. Place back bodice sloper so that there is a one-inch separation at the shoulder-armhole position (A) and an overlap at the neckline seam (B).
3. Place sleeve sloper so that the biceps line touches the underarm - seam points of bodice (point C) and trace side seams of sleeve.
4. To give the sleeve more width, square the side seams from biceps line.
5. The sleeve length is optional. For this sleeve square a line for the bottom of the sleeve 5 inches from the biceps line.
6. Curve line between underarm and side seams of back and front bodice.
7. Complete pattern, adding seam allowance, grain, and notches. (The center-front will be on the straight grain and the back will be on the bias.)

ASSIGNMENT:

1. Duplicate patterns A and B.
2. Develop pattern B in muslin.
3. Design an overblouse using a short kimono sleeve.

FIG. 223A

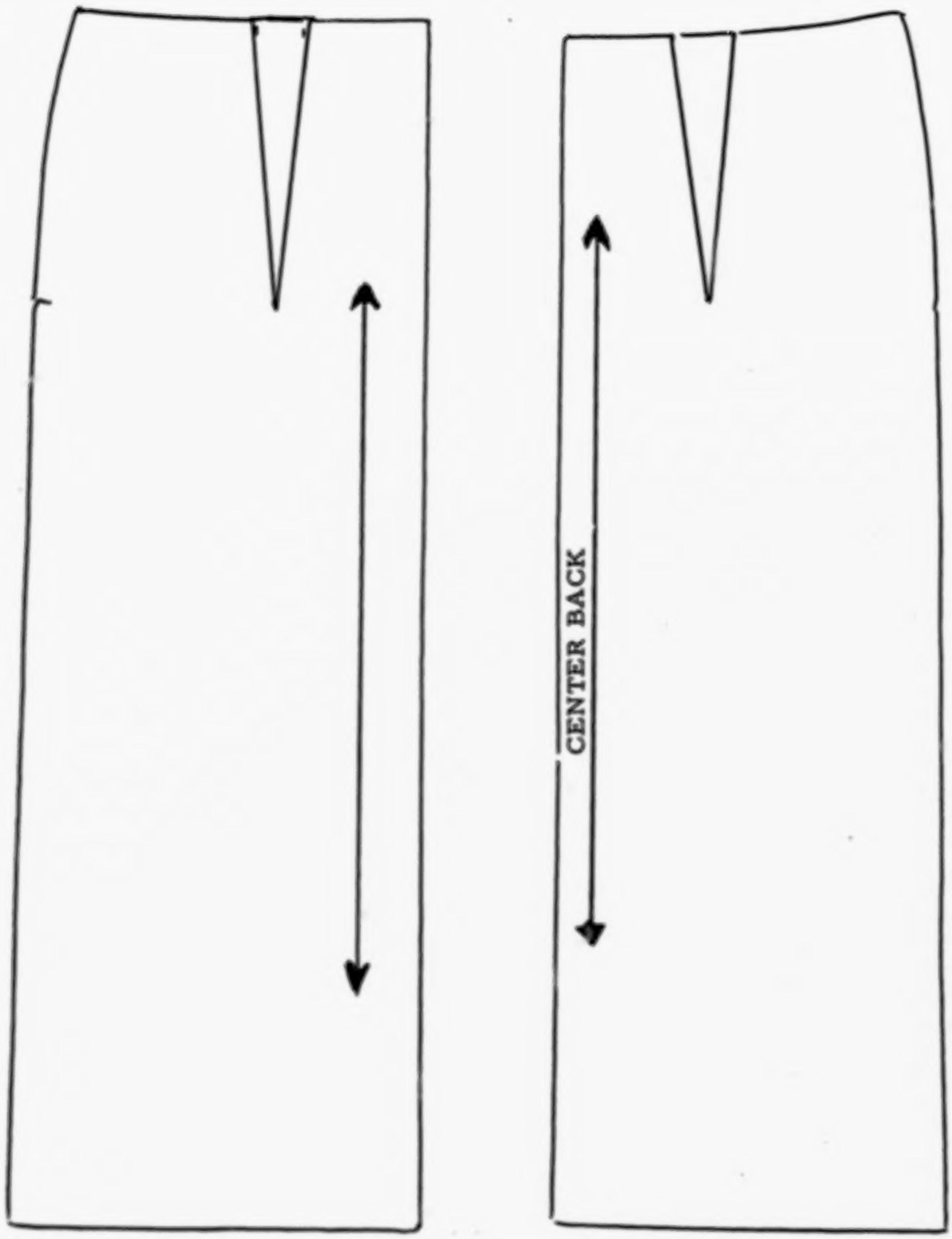
Short Skirts Mean A Business Boom!



UPS AND DOWNS: Solid-line graph shows industrial-goods production as measured by economists' index at left. Fashion sketches show how hemline styles move with business

THIS WEEK Magazine/September 14, 1959

QUARTER-SCALE SKIRT SLOPERS


CENTER BACK

SKIRT SLOPER
SIZE 12

UNIT VIII - SKIRTS

A. Introduction — Lesson 1

OBJECTIVES: To become familiar with some of the past and present skirt silhouettes.
To become familiar with the classification of skirts.

RELATED INFORMATION:

When the couture openings in Paris are sifted down, the greatest design byline news is the skirt line. The silhouette of the entire costume is largely determined by the cut of the skirt and is one of the most important features to be studied when observing fashion changes.

To "skirt" means to encircle an object. Therefore, the outer garment covering the female body from the waist down is called a skirt. The separate skirt is the backbone of any casual wardrobe and takes constant punishment from wear. The attached skirt is a focal point of attraction, the short, direct, and leading line to the ankle.

The silhouette and length of the skirt are vital points in changing styles. The skirt must be proportioned to suit the size of the wearer and the height of the hemline. The length of the skirt is somewhat dictated by the current mode, as ankle, calf, or knee length, but variations occur according to the occasion, purpose or use, the wearer's build, age, and shape of leg. In the early 1960's the "long look" became the new fashion direction for lounge clothes--the dramatic look for at-home clothes. There is no doubt that the skirt will "date" the garment. The actual width of the skirt is based on the texture of the fabric, the build of the person, the blouse design, and the intended use. Heavier fabrics are usually made into narrower skirts; filmy sheer chiffon, net, or tulle into the very full widths.

Most designers use the various modes of yesteryear as the basis for ideas they incorporate in the style trends. The allure of full-blown skirts springing from miniature waistlines is timeless. Some of the most romantic silhouettes of the day hark back to the side-wide shaping of the eighteenth century, but with a most welcome difference - the cage-like iron hoop skirts have given way to clever, less cumbersome construction based on either layers of filmy net or firm interlinings.

Three popular skirt silhouettes are tubular, cone, and bell--that is, straight, full, or shaped. The tubular is derived from one or more sections of cloth, shaped to outline the hip area and from that level to fall downward as straight as possible. The cone is derived from cloth cut in circular shape, and the bell is produced from a broad segment of cloth, the top of which is gathered, pleated, or shirred into the waistline.

The straight or slim skirt may have fullness added to the waistline of the skirt and none at the hemline or may be developed with flat pressed pleats or straight gores.

In analyzing skirts, there are the following three areas to be considered:

1. Sweep - width at the hemline.
2. Movement - fullness or bulk of silhouette.
3. Break point - where the fitted area of the skirt breaks away from the body into movement.

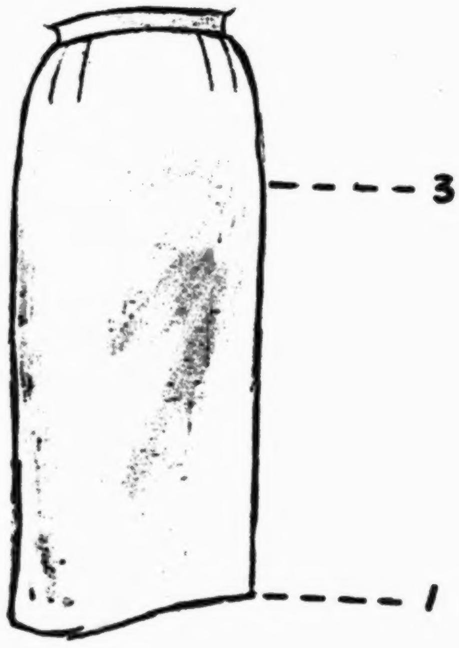


Fig. 223B

ASSIGNMENT:

1. Using any historical books for research, copy six styles for your notebook from over a period of 200 years.
2. Using styles collected in (1), design six skirts that would be fashionable this year. Be sure to include the historical sketch along with original design.
3. Design three skirts that could be worn with a tailored jacket.
4. Draw a skirt with a cascade down the side.

B. Developing Slim Skirts

Changing the One Basic Dart into Two or More Lesson 2

OBJECTIVES: To learn how to change the basic front sloper with a single dart into styles using two or more darts.

To become familiar with several areas of the skirt front that can use several darts for style interest.

RELATED INFORMATION:

The basic sloper for developing original skirts consists of a back and front sloper. The front skirt sloper has one dart placed over the high point of the front hip. The waistline matches the bodice-front waistline. The back skirt sloper has one dart placed over the buttock.

The pencil-slim skirt seems the natural complement of a suit jacket. Slim figures wear the straight skirt better than do large-hipped or rotund figures. However, the skinny, bony-hipped girl should not wear the straight skirt fitted too closely, both because her overslim figure is accented and because this usually results in a mincing gait due to legs too long in proportion to the width of the skirt. For the large-hipped person a modest flare at the hemline is better to balance her hips.

PROCEDURE:

Example A. Dividing dart by tracing

The one basic dart may be copied on tracing paper and then divided into two or more darts.

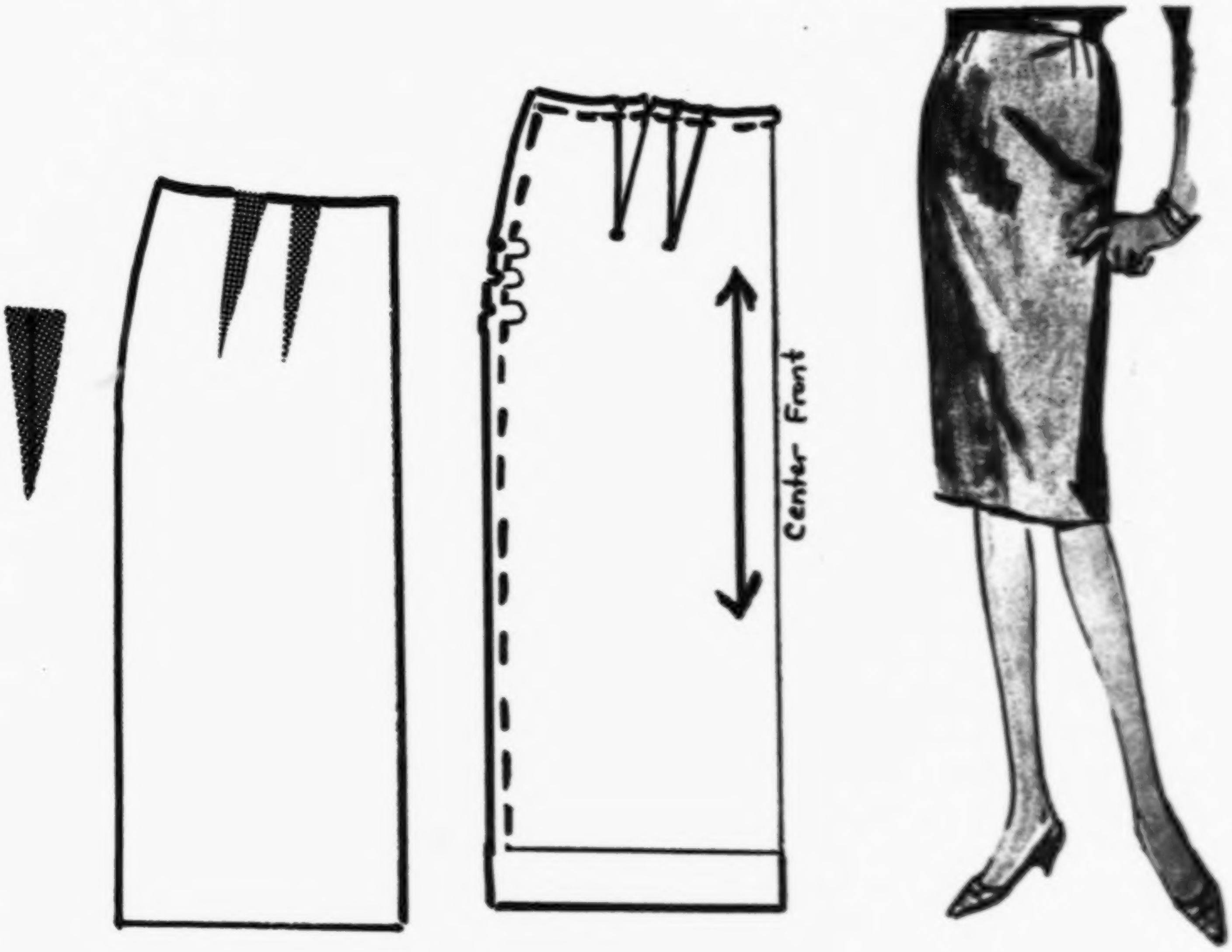


Fig. 224

1. Trace basic sloper dart.
2. Copy complete front basic skirt sloper.
3. Erase the original dart on sloper copy.
4. Place the copied dart, divided as desired, so that the darts are not parallel to the center-front or to each other but are farther apart at the lower end than at the waist. This gives a slimming effect.
5. Complete pattern, true darts, add hem, etc.

Example B. Dividing by slashing and spreading

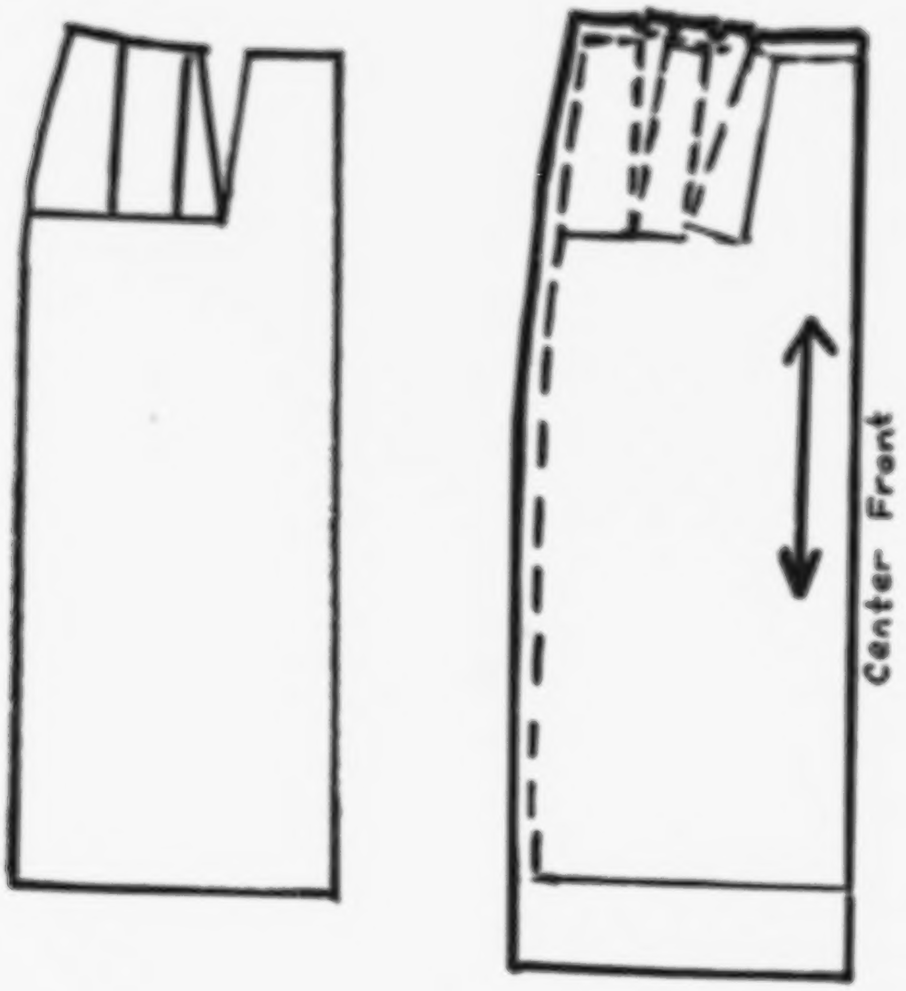


Fig. 225

1. Trace basic skirt sloper.
2. Mark position of new style darts.
3. Slash original dart and style lines.
4. Close original dart and spread style lines as desired.
5. True new darts.
6. Complete pattern, notches, dart lines, seam allowance.

Example C. Removing the basic dart from skirt at waistline

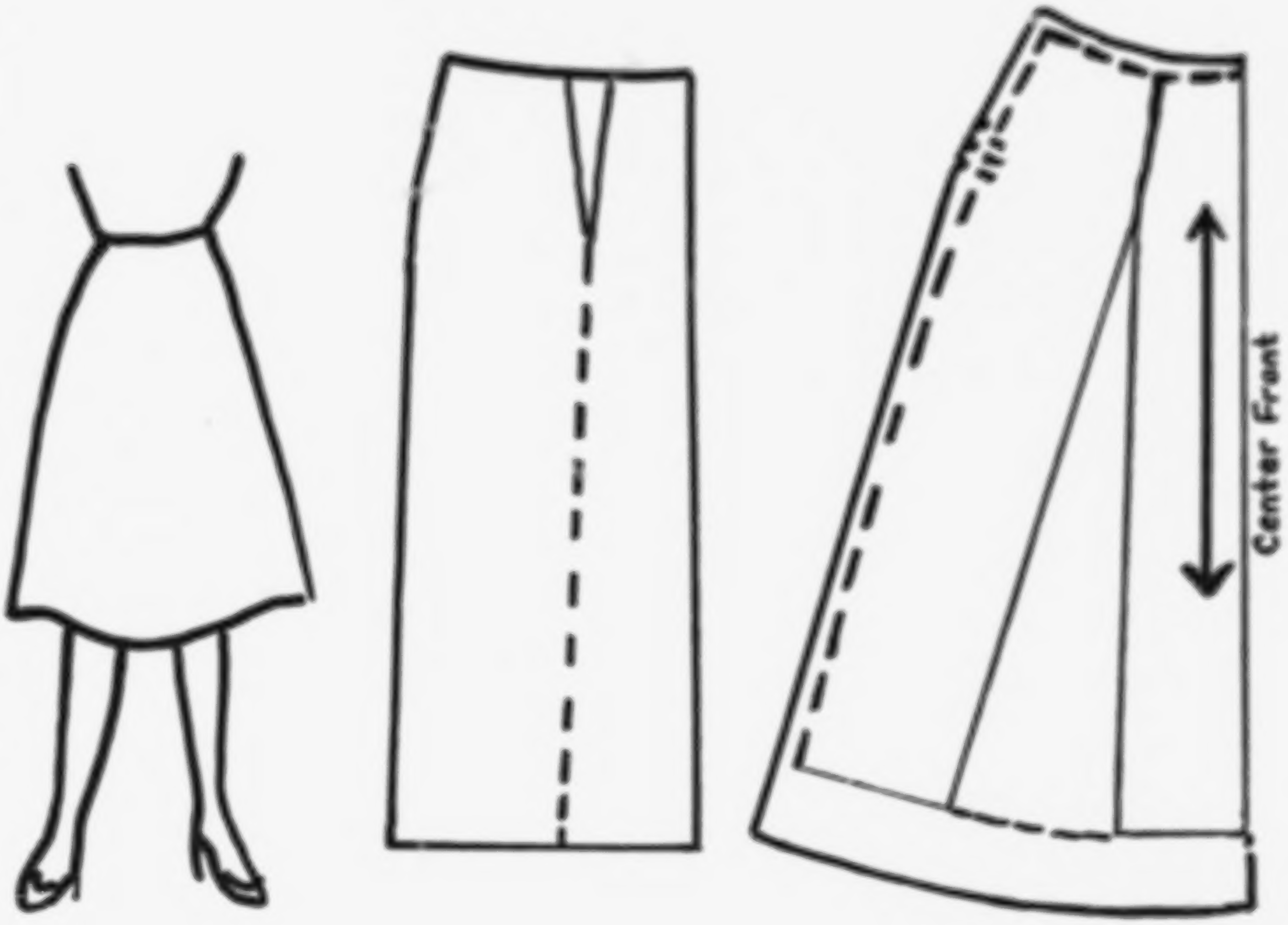


Fig. 226

1. Copy the basic skirt sloper.
2. Draw a slashing line from the end of the dart to the hem, slightly farther from the center-front at the bottom than at the end of the dart.
3. Slash dart and the skirt from bottom of skirt up to end of dart and spread pieces until dart is closed.
   (Note that the side seam is more on the bias, the waistline more curved, and the lower skirt area wider. This type of pattern is used for the A-line skirt, and for developing skirts with unusual horizontal, diagonal, or vertical seaming.)
4. Complete pattern.

ASSIGNMENT:

1. Duplicate styles A, B, and C.
2. Using the information for slashing and spreading, construct the skirt shown here. Do the pattern first and then analyze what you have done by listing the step-by-step instruction.
3. Collect three pictures of skirts with different placements of darts.

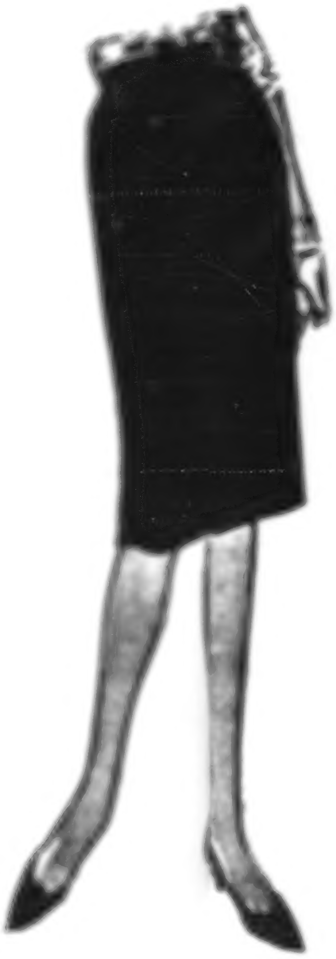


Fig. 227

C. Adding Fullness to Basic Skirt Sloper Lesson 3

OBJECTIVE: To review the principles of slashing and spreading in relation to skirts.

RELATED INFORMATION:

A peg-top, more recently known as the bell-shape skirt, has fullness introduced at the top of the skirt and not at the hemline. Unpressed pleats, draped folds, or gathers may be added for decoration, softness, or fullness to the basic skirt sloper through the use of slashing and spreading. Any such change must be made after the structural shapes and lines have been formed on the draft. It is important to place the slash and style lines on the draft of the basic sloper in the direction in which the fullness is to drape.

A simple peg-top skirt can also be developed through the use of the waistline dart.

PROCEDURE:

Example A. Peg-top with gathers

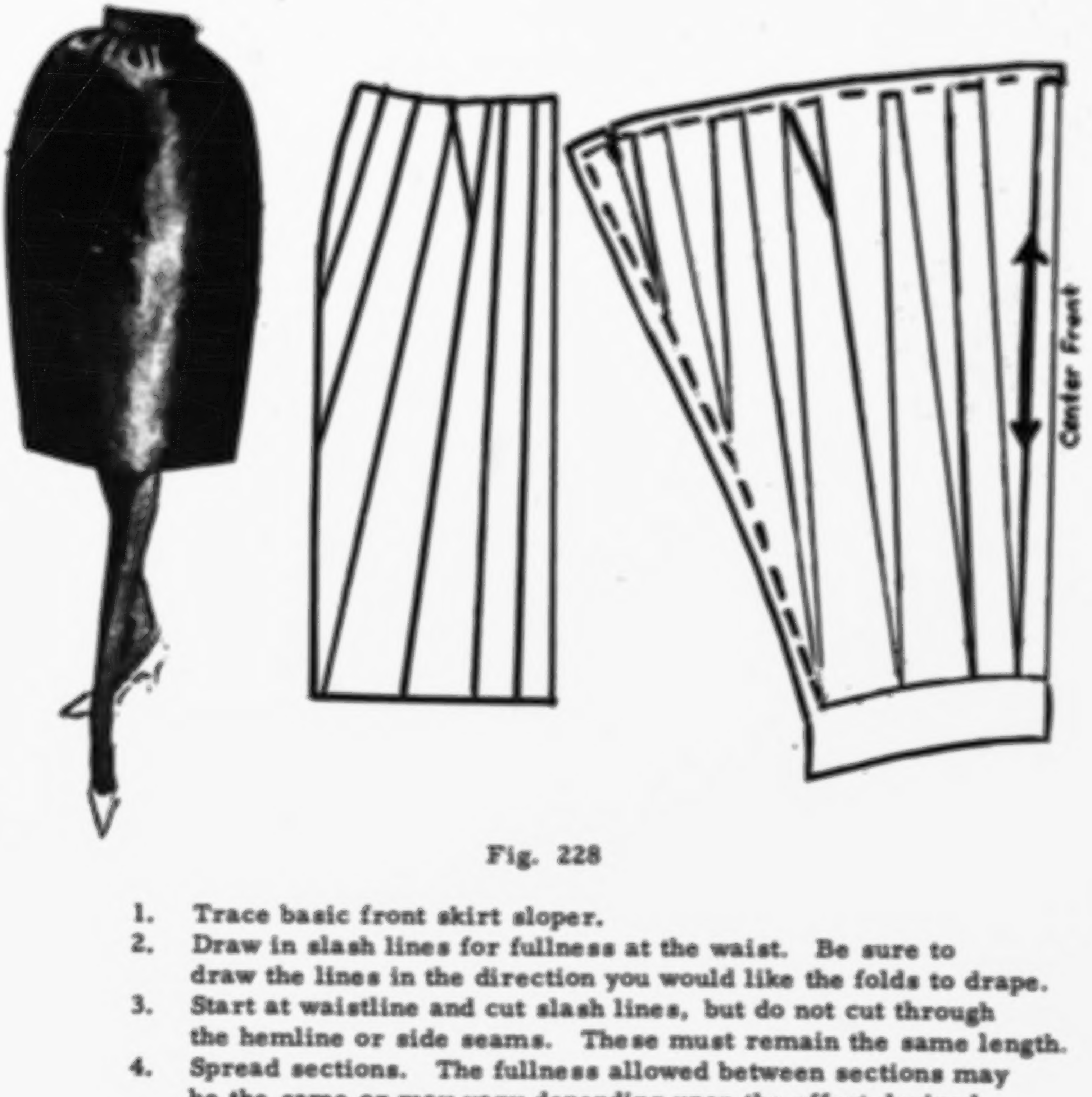


Fig. 228

1. Trace basic front skirt sloper.
2. Draw in slash lines for fullness at the waist. Be sure to draw the lines in the direction you would like the folds to drape.
3. Start at waistline and cut slash lines, but do not cut through the hemline or side seams. These must remain the same length.
4. Spread sections. The fullness allowed between sections may be the same or may vary depending upon the effect desired. For example, if more fullness is desired at the center-front, spread front sections more than the others.
5. Place crossmark for waistline gathers at the slash line closest to the side seam.
6. Blend waistline seam.
7. Complete pattern, seam allowance, grainline, and notches.

Example B. Bell-shape with unpressed pleats

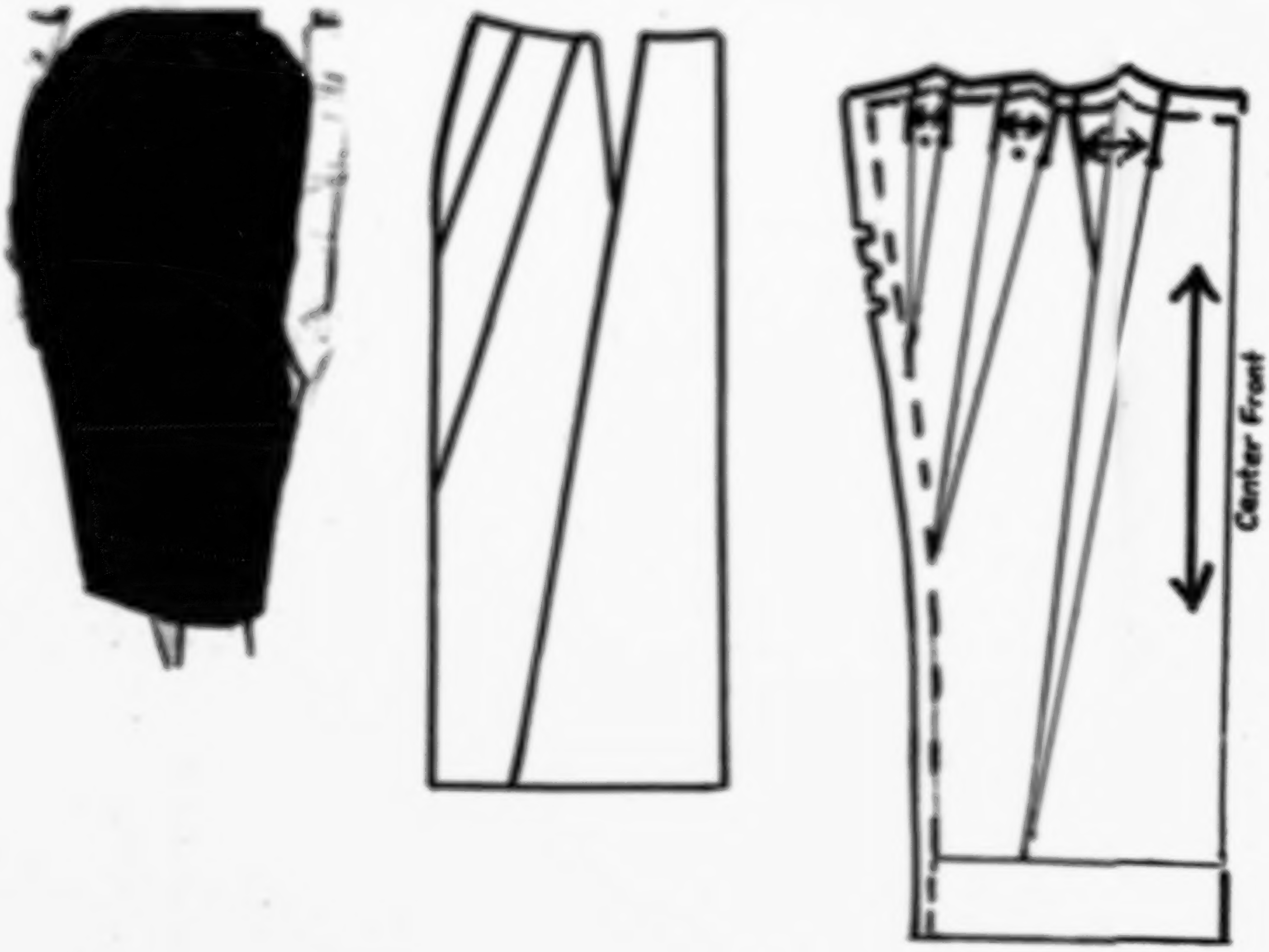


Fig. 229

1. Trace basic front skirt sloper.
2. Draw in slash lines for pleats at desired position at waistline and continue line in the direction the pleats are to drape. (The waistline dart will be used as one of the soft pleats.)
3. Start at waistline and cut slash lines, but do not cut through hemline or side seam.
4. Spread sections for effect desired. The fullness between sections may be the same or may vary.
5. Draw a line 2 inches long at waistline along each side of slash lines.
6. True waistline seam by folding pleats in the direction desired. These can be turned toward either the front or the side seam.
7. Complete pattern--add seam allowance, grainline, markings for pleats, seam notches.

ASSIGNMENT:

1. Duplicate pattern A. Make two different peg-top skirts by changing the fullness.
2. Duplicate pattern B, first with pleats toward center and then with pleats toward the side.
3. Collect six pictures of garments with the peg-or bell-shaped skirt for future use.

D. Developing Gored Skirts

The Four- and Six-Gore Skirt — Lesson 4

OBJECTIVES: To learn the principles of planning gored skirts.

To learn to construct the 4- and 6-gore skirts.

RELATED INFORMATION:

A gore is a section of a skirt. While a skirt can be made with only one piece of material wrapped around the figure, this is not especially flattering or comfortable for general wear. Most skirts are made of two or more gores. The two-gore skirt may have the seams either at the back and front or at the two sides. A three-gore skirt may have one gore at the front and two at the back. Four, five, six, eight and more gores are arranged with the seams in different positions.

A gore skirt is a sectional skirt. Each gore is a panel of the skirt. A panel line is more pleasing to the eye when it is drawn so that the panel is wider at the bottom than the top by at least one inch. In the early 1960's a 40-gore skirt which was full at the bottom was very popular. Adding seams to a skirt tightens the skirt and eliminates give. Gores are added to the basic skirt for the following reasons: (a) They are flattering to most figures; (b) they give freedom of motion; (c) they give a slenderizing line.

A seam flare is additional width or fullness added gradually between two seams of the skirt. A skirt can have any number of lengthwise seams, as indicated above, dividing the skirt into panels or gores. The width is usually added from hip to hem, depending on styling and what the industry is doing. The narrower the center panel, the slimmer the figure appears.

The gored skirt is a basis for developing many silhouettes, by changing:

1. The position of the flare points.
2. The number of seams used.
3. The degree of flare added to each seam.

For a slim skirt the flare point starts at the hipline. For a full skirt, the flare point can be placed anywhere between the waistline and hipline.

PROCEDURE:

Example A. **Six-gore skirt** **(3-gore front, 3-gore back)**

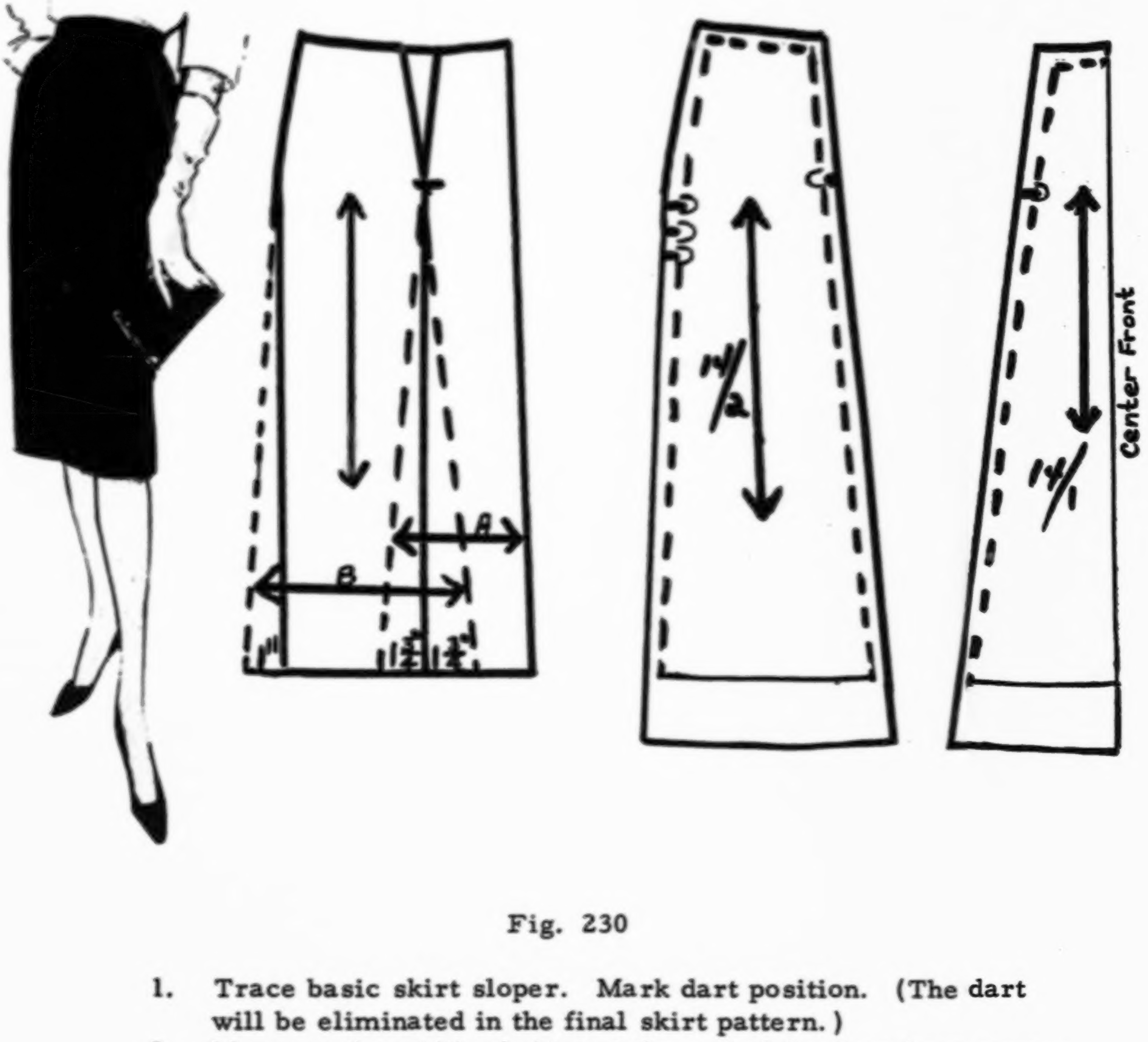


Fig. 230

1. Trace basic skirt sloper. Mark dart position. (The dart will be eliminated in the final skirt pattern.)
2. Measure the width of skirt at the end of the dart from center-front to dart and mark this width plus ¼ inch at the bottom of skirt.
3. Draw a line from end of dart to mark at bottom. This is the basic guide line for planning the gores.

4. Planning center-front panel (A):

   a. Add $1\frac{3}{4}''$ to the left of the basic line at hemline. Crossmark. (Amount of flare depends on style desired.)
   b. Connect the crossmark at the bottom to the hip and then follow through to the top of the dart position. (If this does not form a straight line, then it should be made into a smooth curve.)
      (Note: It is best to use different colored pencils for the different gores, for future tracing.)

5. Planning side panel (B):

   a. Add $1\frac{3}{4}''$ to the right of the basic line of the draft Crossmark. (Amount of flare depends on style desired.)
   b. Connect the crossmark at the bottom to the hip and then follow through to the top of the dart position, as before.
   c. Add one inch to the bottom width of the side panel at the side seam and connect crossmark to the hip position.
   d. Be sure to crossmark the two gores at the hip for future notching.

6. Mark grainline parallel to the center-front.

7. Trace pattern pieces for center-front panel and side panel.

8. Since the new gore lines are longer than the original vertical lines of the skirt, they should be shortened slightly in the final draft. Draw gently curving hemlines from the shortened gore lines to the original center-front and side seam lines.

9. Add seam allowances, notches, and grain lines on final pattern pieces.

10. Add two-inch hem.

11. Repeat this procedure for back of skirt.

Example B. Four-gore skirt

The four-gore skirt has seams at sides, center-front, and center-back. The principles used in bodice and sleeve styling are also used in skirt styling. Dart control may be shifted or divided; it may be used as darts, dart-tucks, or pleats; it may be taken out in gathers, shirring, or smocking. The four-gore skirt is constructed by simply shifting the dart control to the hemline and adding any additional flare desired.

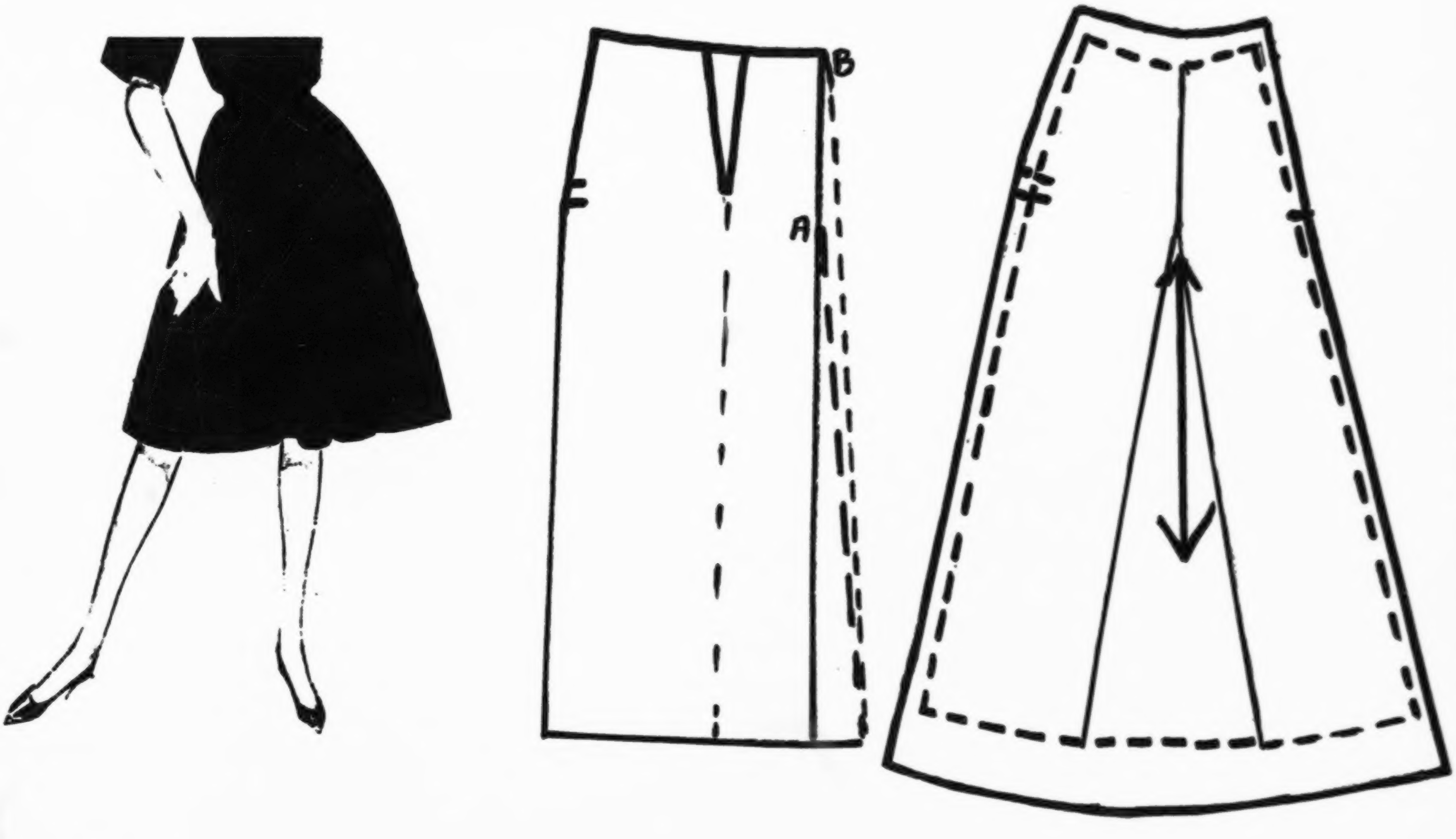


Fig. 231

1. Trace front skirt sloper.
2. Crossmark at the hip--7" down from waist on the side seam.
3. Draw slash line from the dart point to the hemline, parallel to the center-front.
4. Cut out pattern.
5. Slash the dart lines and the vertical line.

6. Close the waistline dart, thereby shifting the control to the hemline.

   Note: Flare may be added to the center-front to give a nicely balanced gore. This may be done in two ways: (a) The flare can break from the hipline, assuring a smooth fit over the hips; or (b) the flare can break from the waistline, giving a little more fullness over the hips.

7. Add the center-front flare you desire and complete pattern.

ASSIGNMENT:

1. Develop the four-gore and six-gore skirts.

2. Bring in six pictures of gored skirts.
   Select two and develop patterns for them.

D. Developing Gored Skirts

Multigored skirts

Lesson 5

OBJECTIVE: To learn the principle of developing multigored skirts.

RELATED INFORMATION:

In the making of swing skirts, skirts of eight to twenty gores, and the extremely full or bouffant types of dance skirts, it is not necessary to develop the skirt from the basic sloper. All the gores in the skirt will be cut alike; therefore only one gore pattern is needed.

The pattern may be developed by using the skirt foundation pattern made with waist dart thrown into the circular hem, drafting the pattern according to the measurements of the waist, hip, and length; or by using the four-gore skirt pattern and dividing it equally to make the eight-, twelve-, or sixteen-gore skirt.

The multigored skirt may have as much width or shaping added to the bottom as desired, tapered to nothing to the flare point. This will produce a very swirly skirt with snug-fitting hips.

PROCEDURE:

Example A. Developing 10-gore skirt front using the one-gore pattern without waist dart (with seam at center-front)

1. Use skirt pattern (without seam allowance) developed in Lesson 2, Example C, Fig. 226.

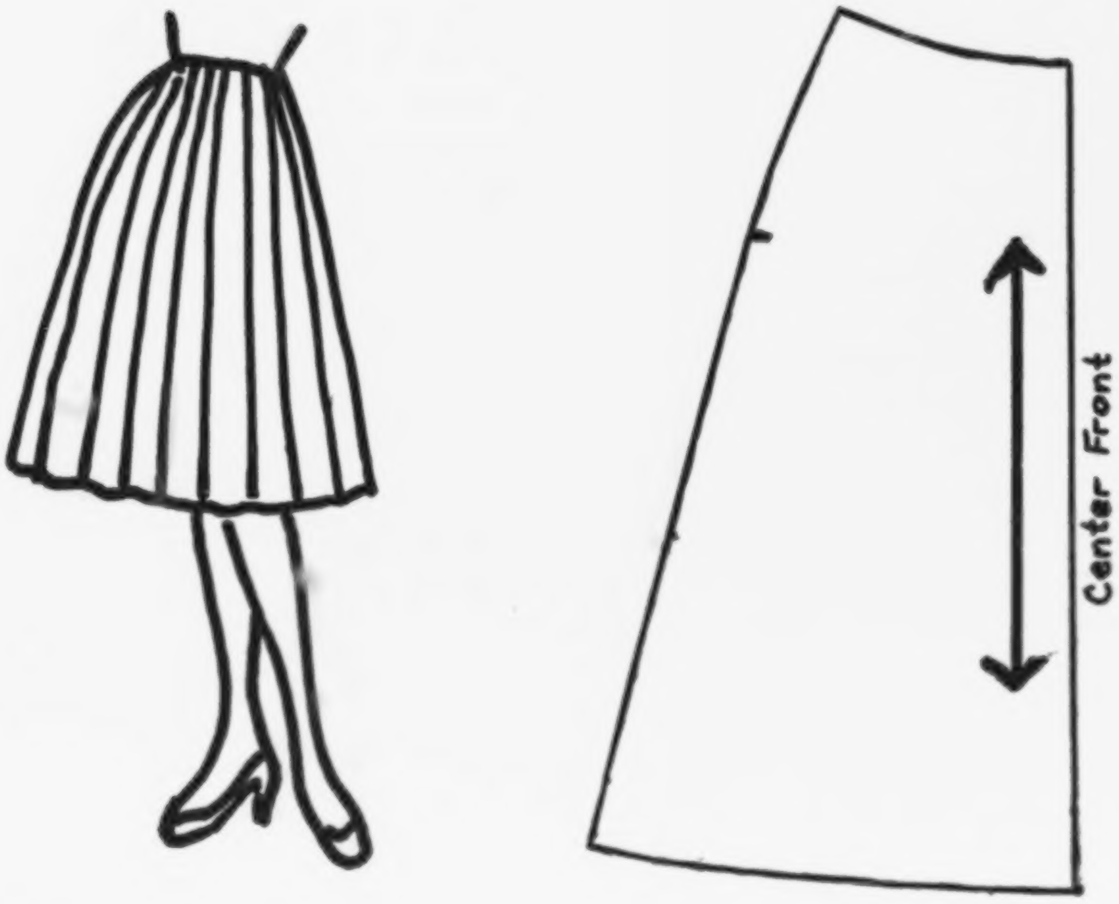


Fig. 232-A

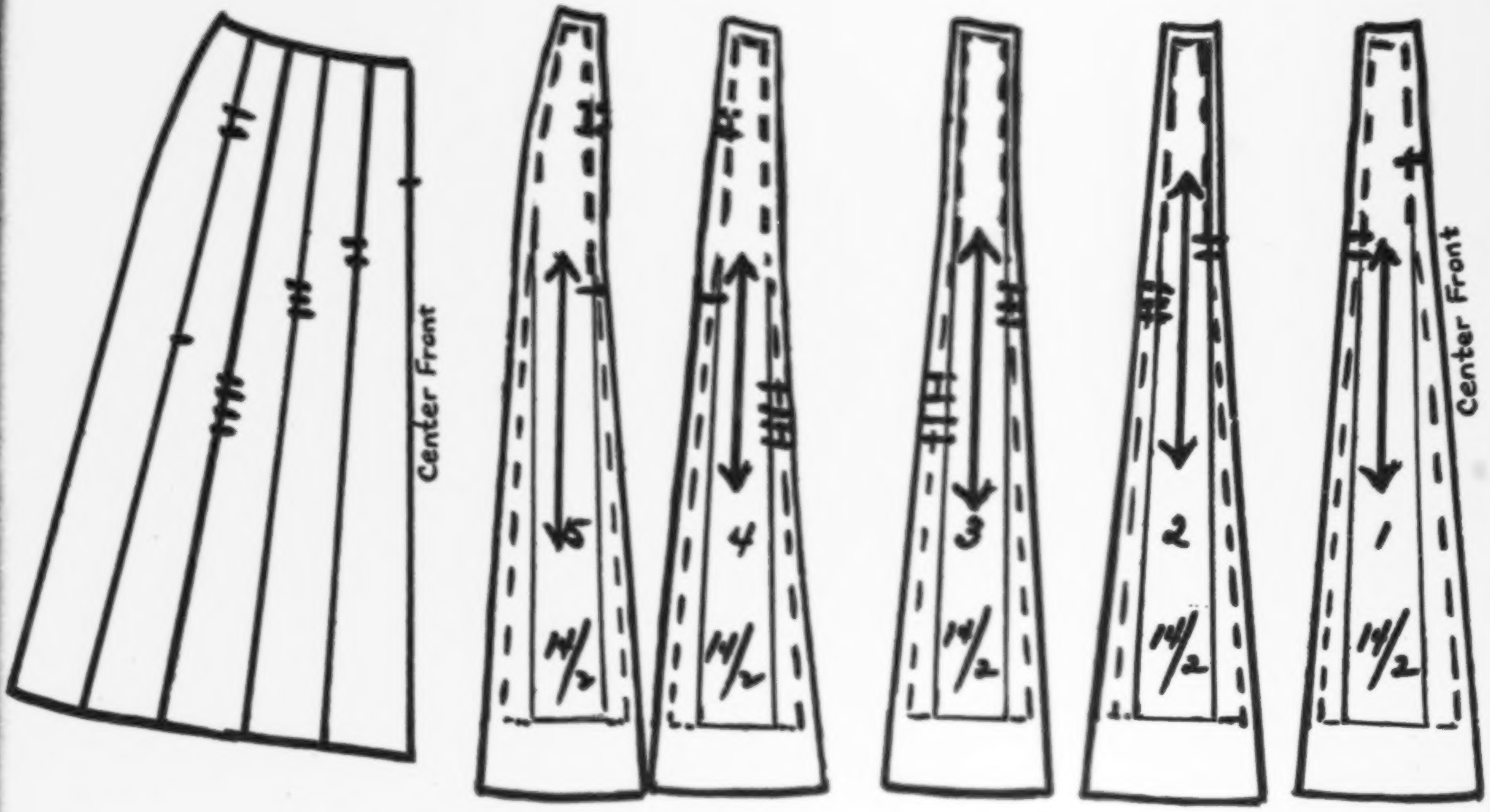


Fig. 232-B

2. Trace the one-gore pattern (Fig. 232-A) on pattern paper. Divide the waistline and hemline by five (this is for one-half of the pattern).

3. Draw in the desired gore lines; mark notches to keep in the right sequence.

4. The center line of each gore is usually made the grain line.

5. Cut along style lines and separate.

6. After separating gores, increase the width at the lower edge of each gore. (This can be any width desired.)

7. Decide where the increased flare should begin--at hip, just below hip, or at the knees.

8. Complete pattern, notches, seam allowances, etc.

Example B. Drafting a 16-gore skirt according to the measurements of waist, hip, and length (8-gore front, 8-gore back)

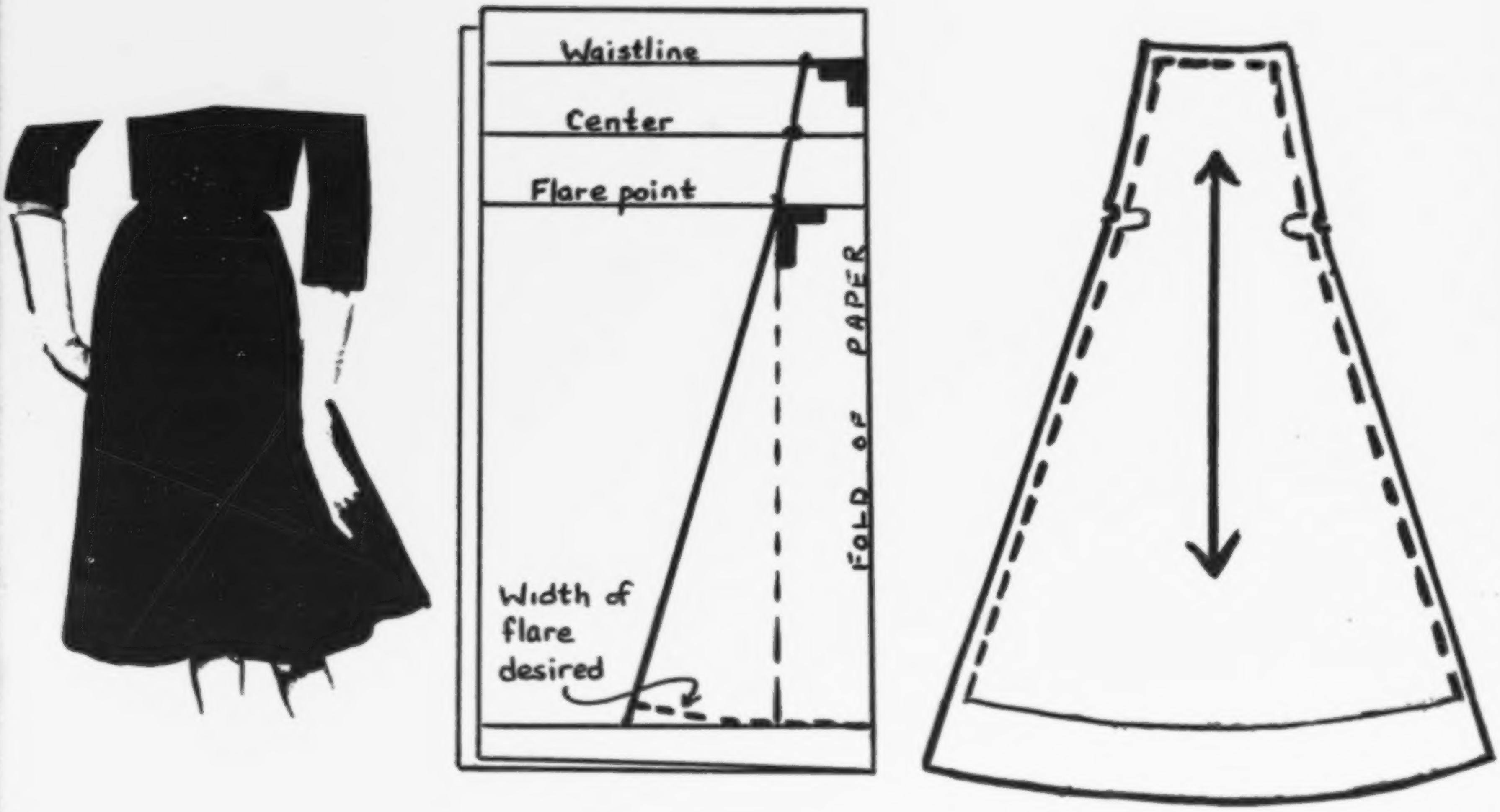

Waistline
Center
Flare point
FOLD OF PAPER
Width of flare desired

Fig. 233

FRONT:

1. Measure waistline, flare point, and the center between these two points of your sloper or dress form.
2. Divide each of these measurements by the number of gores desired; in this case, it will be by 16.
3. All multiple-gored skirts should have the grainline in the center of the gore. Therefore, develop pattern by folding paper in half.
4. On the folded edge, mark the waistline, flare and center points, according to your measurements.

5. Square a line from the center fold at each of these points, making each line one-half of the appropriate full-gore measurement.
6. From flare point square a line down to hemline.
7. From point (6), measure out the desired extra width of the gore and connect to flare point.
8. Connect flare point to waistline. Line may be slightly curved from flare point to waistline, depending upon shape of figure.
9. Add seam allowance and notches.
10. Trace finish lines to folded-under section of paper.
11. Indicate grainline.

ASSIGNMENT:

1. Develop pattern A.

2. Develop pattern B, using the following measurements:

    a. Waist 28", center point 36", hips 38"

    b. Waist 25", center point 33", hips 36"

3. Collect six pictures of umbrella or tulip skirts, to be developed later.

UNIT VIII - SKIRTS

E. Circular Skirts Lesson 6

OBJECTIVE: To learn to develop the full circular skirt, using two methods.

RELATED INFORMATION:

Many times a dress is designed with "worlds" of flare at hemline but flat-fitting at the waistline. This skirt is classed as circular. Today many party and dance dresses are cut circular. Recently there have been fads of the circular skirt cut from a complete circle in felt, denim, or broadcloth. Many of the fabrics soon sagged on all the bias folds, but the firmer weaves remained reasonably even at the hem line.

A flare is additional width or fullness added to a skirt gradually, from some point down to the hem. Circular flares are so named because the skirt pattern is spread in a circular fashion to obtain the additional width. The basic skirt pattern can be cut and spread as much as desired for circular flare.

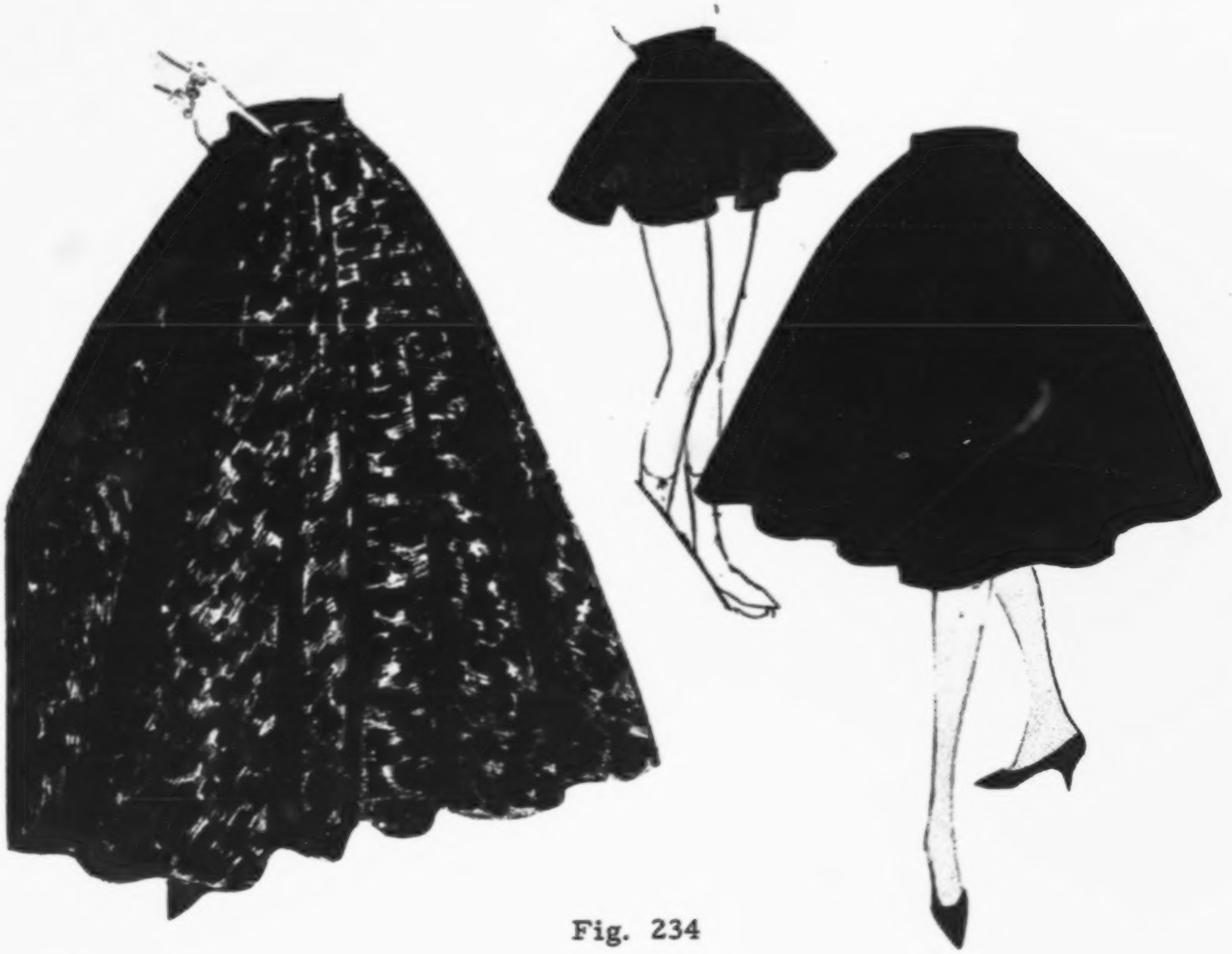


Fig. 234

The full-circular skirt is not becoming to some women, as it will necessarily increase the appearance of the wearer's hip measurement. It is the basis for skating skirts and is particularly flattering when the figure is in motion. Bouffant evening gowns of net, chiffon, or tulle may be made of several circles.

The circular skirt may be developed by using:

a. full circle
b. $\frac{3}{4}$ circle
c. $\frac{1}{2}$ circle
d. $\frac{1}{4}$ circle

In addition, a variation of designs may be obtained by introducing pleats, gathers, tucks, and detailed hemlines.

In the development of the circular pattern, one may use (a) the slash-and-spread method, or (b) drafting by using waist and length measurement. A technique in slashing is to avoid cutting the lines all parallel, but rather to divide the hem equally into as many parts as the waistline, so that the lines radiate from the waistline and enter it at right angles. Wherever there is a slash there will be a ripple. If many slashes are made, the circularity will be gradual and the skirt will hang in many folds; but one or two slashes will make one or two deep folds at those places in the finished garment.

PROCEDURE:

Example A. Drafting a full-circle skirt by using waist and length measurements

Example:
Waistline: 25" minus 1" = 24"
24" divided by 6 = 4"
4" = radius

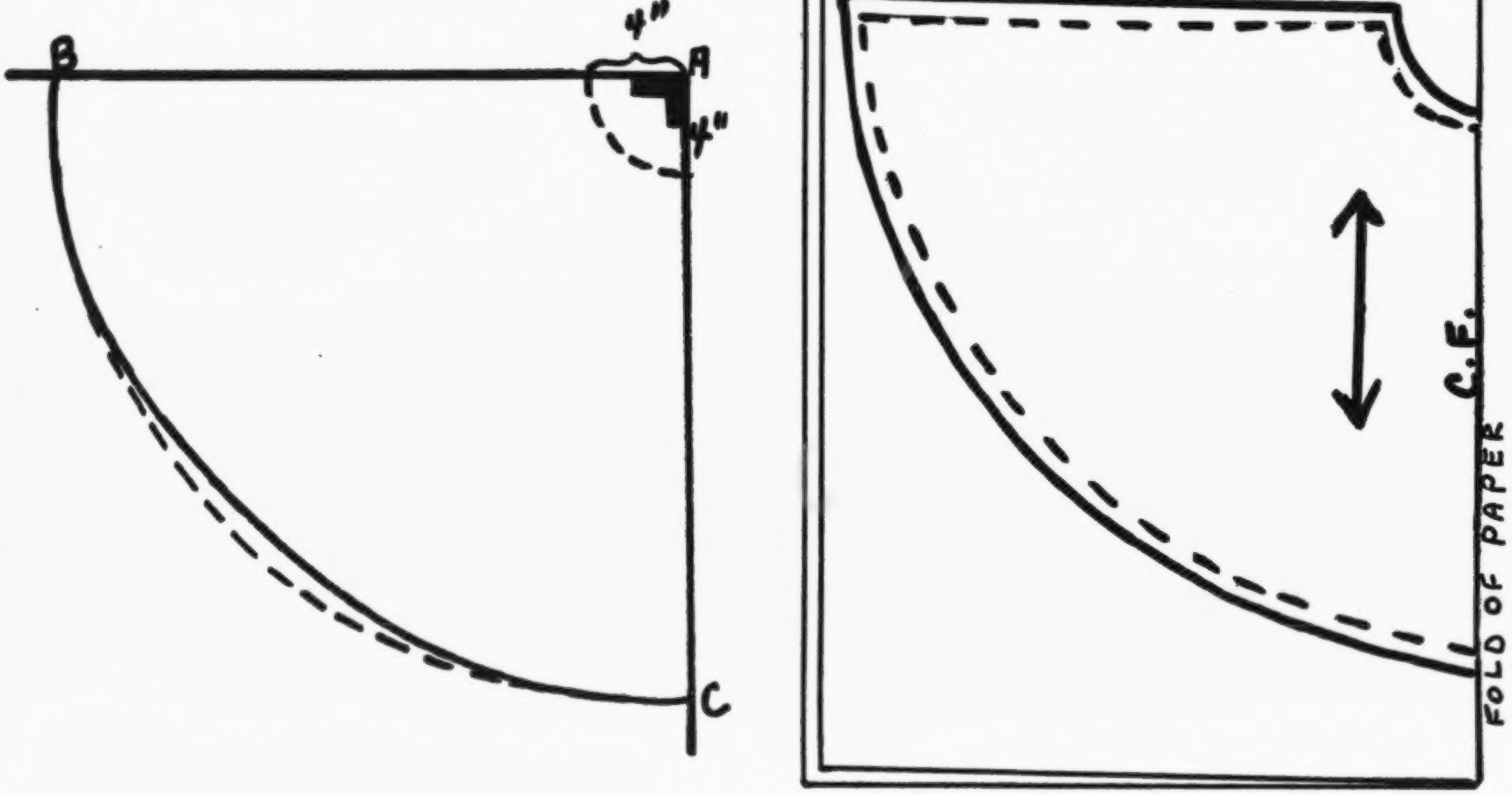


Fig. 235

1. Determine waistline measurement and subtract 1 inch.
2. Divide this measurement by 6. This will give a figure for the radius of the waistline.
3. Draw two lines at right angles to each other.
4. Measure from point (A), the determined radius, as illustrated, on both lines. Connect the two points with a quarter-circle. This will be the waistline.
5. From waistline, measure the desired length and mark completely with a quarter-circle from (B) to (C).
6. The center of the panel will be true bias. This will tend to sag a little when sewn. Shorten length one inch at this point.
7. To make pattern for a one-piece-front circular skirt, fold paper and transfer your draft.
8. Complete pattern, adding seam allowance at the waist and side. Add 1 inch for a hem.
9. To make pattern for 2-gore front skirt, add seam allowance at center-front.

Example B. Drafting a full-circle skirt by slash-and-spread method.

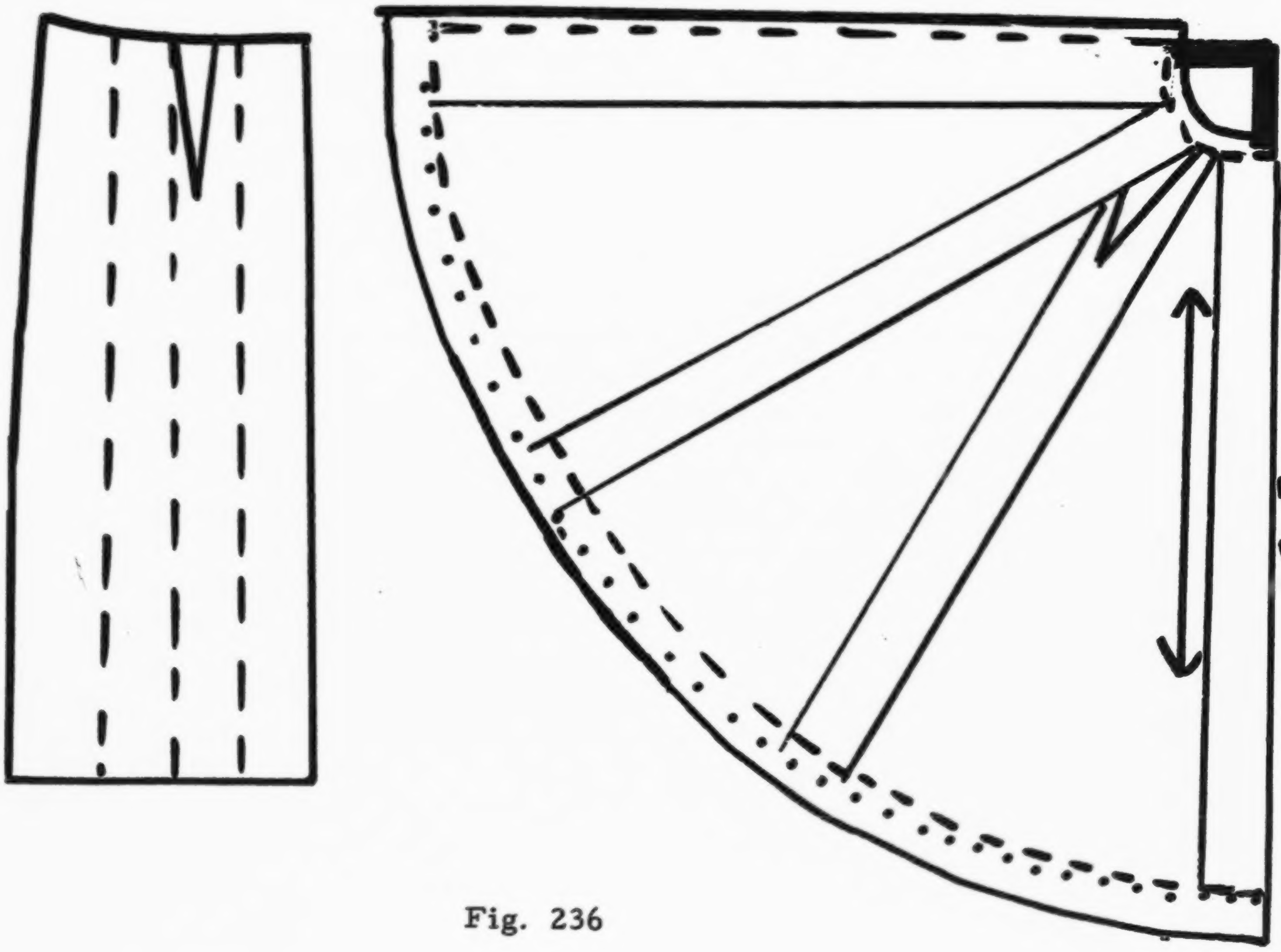


Fig. 236

1. Trace basic skirt sloper.
2. Draw in slash lines. Divide skirt into four equal panels, disregarding dart.
3. Draw two lines at right angles to each other on another sheet of paper.
4. Cut slash lines on draft.
5. Place center-front on lengthwise line drawn on paper.
6. Spread slashed draft until side seam is on crosswise line drawn on paper. Overlap inner ends of panels to form curve. Be sure to have basic dart closed.
7. Blend hemline, connecting all slash lines with a dotted line.
8. Shorten hemline one inch at the center of the panel, shown by broken line.
9. Complete pattern, notches, seam allowance, hem allowance, shown by a smooth line.

ASSIGNMENT:

1. Develop the full-circle pattern by both methods.
2. Develop a half-circle skirt--26" waistline and 24" long.
3. Develop a quarter-circle skirt--24" waistline and 22" long.

UNIT VIII - SKIRTS

F. Skirts With Yokes Lesson 7

OBJECTIVE: To review the principles of developing yokes and to apply them to skirts.

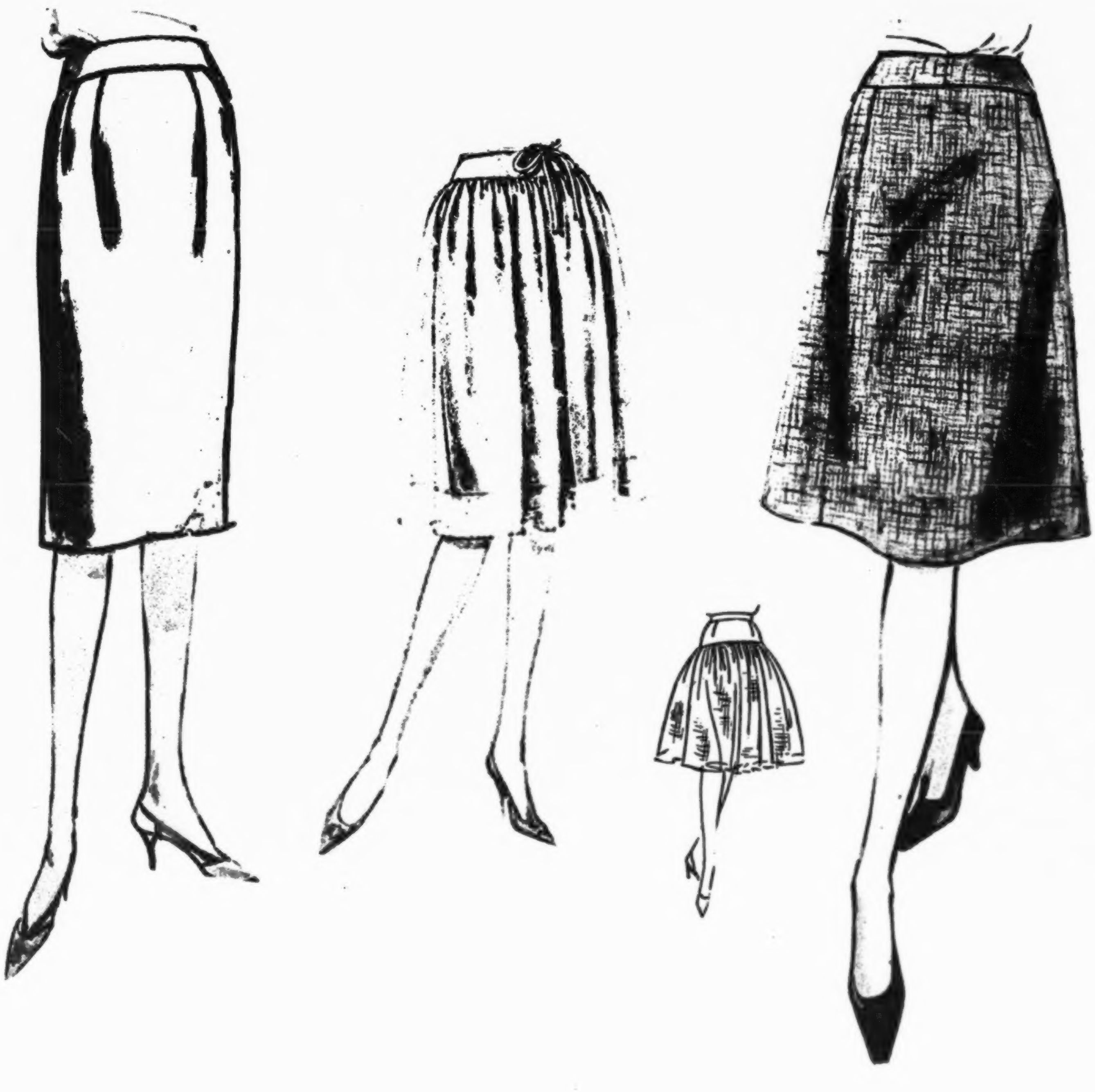


Fig. 237

RELATED INFORMATION:

A skirt yoke is the fitted section from waist to hip. Many times the yoke is used to eliminate bulk at the waistline. It gives a smooth and slim line over the hip. Shape and proportion must be considered in styling the yoke line. When the yoke points down at the center-front, the interest is removed from the silhouette, giving a slenderizing effect. It is important that the style line of the yoke at the side seam be the same length in back and front.

The final blending of horizontal and oblique lines should be slightly curved. A horizontal line which in the fashion sketch appears drawn with a ruler is usually a curve following the curve of the waistline. A plain horizontal yoke is usually cut deeper in the back. If the yoke continues as a part of the front panel, the vertical lines of the panel are drawn with a ruler (see Fig. 239).

The yoke also may be cut into other crosswise or lengthwise sections, or have overlaps with hems and buttonholes, but always the waistline, hipline, and seam adjoining the lower sections are accurately preserved in size.

A panel attached in one piece with the yoke is treated as a gore of a skirt. As such it may have side pleats added part of or all the way up, or some flare added to the sides in harmony with other skirt sections.

A yoke line or a style line drawn in the area of the skirt darts is handled in the same way as in all other dart areas. The yoke line should not be drawn lower than the hip section if the yoke line is to remain a fitted line.

The lower section may be left unchanged if desired, but usually the purpose of a yoke is to allow one the opportunity of adding gathers, or flare through circularity, or freedom in a straight-line effect through pleating.

PROCEDURE:

Example A. Yoke separate from skirt

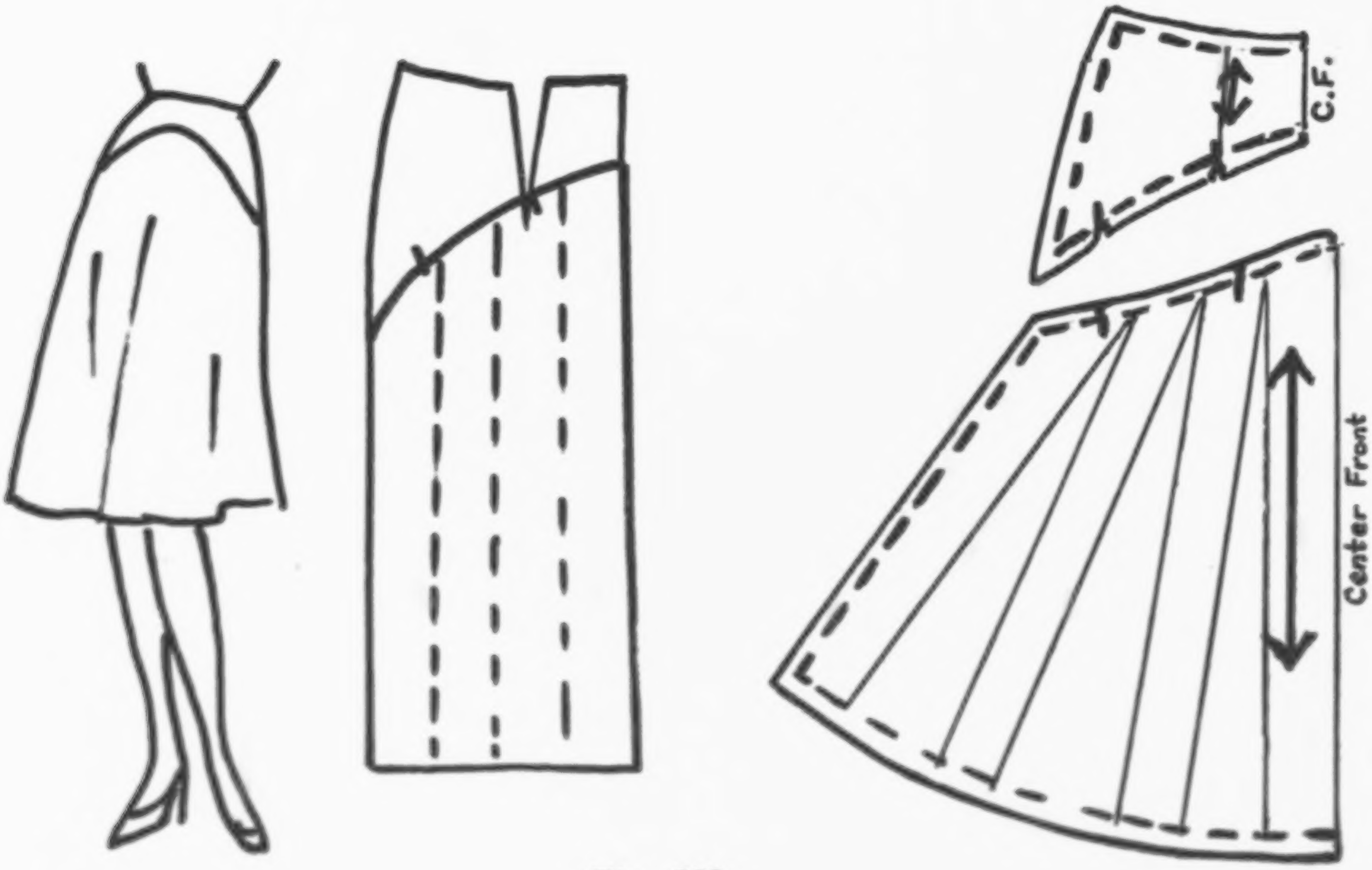


Fig. 238

1. Trace basic front skirt sloper.
2. Draw in style line for yoke, keeping in mind good line and proportion. Draw in style lines for desired fullness in skirt.
3. Place crossmarks as shown.
4. Trace yoke from draft and close dart. Add seam allowance, notches, grainline.
5. Trace skirt from draft:
    a. Slash style lines and spread to desired width.
    b. Shorten skirt slightly in center of panel.
    c. Add seam allowance, notches, and grainline.

Example B. Hip yoke and front panel

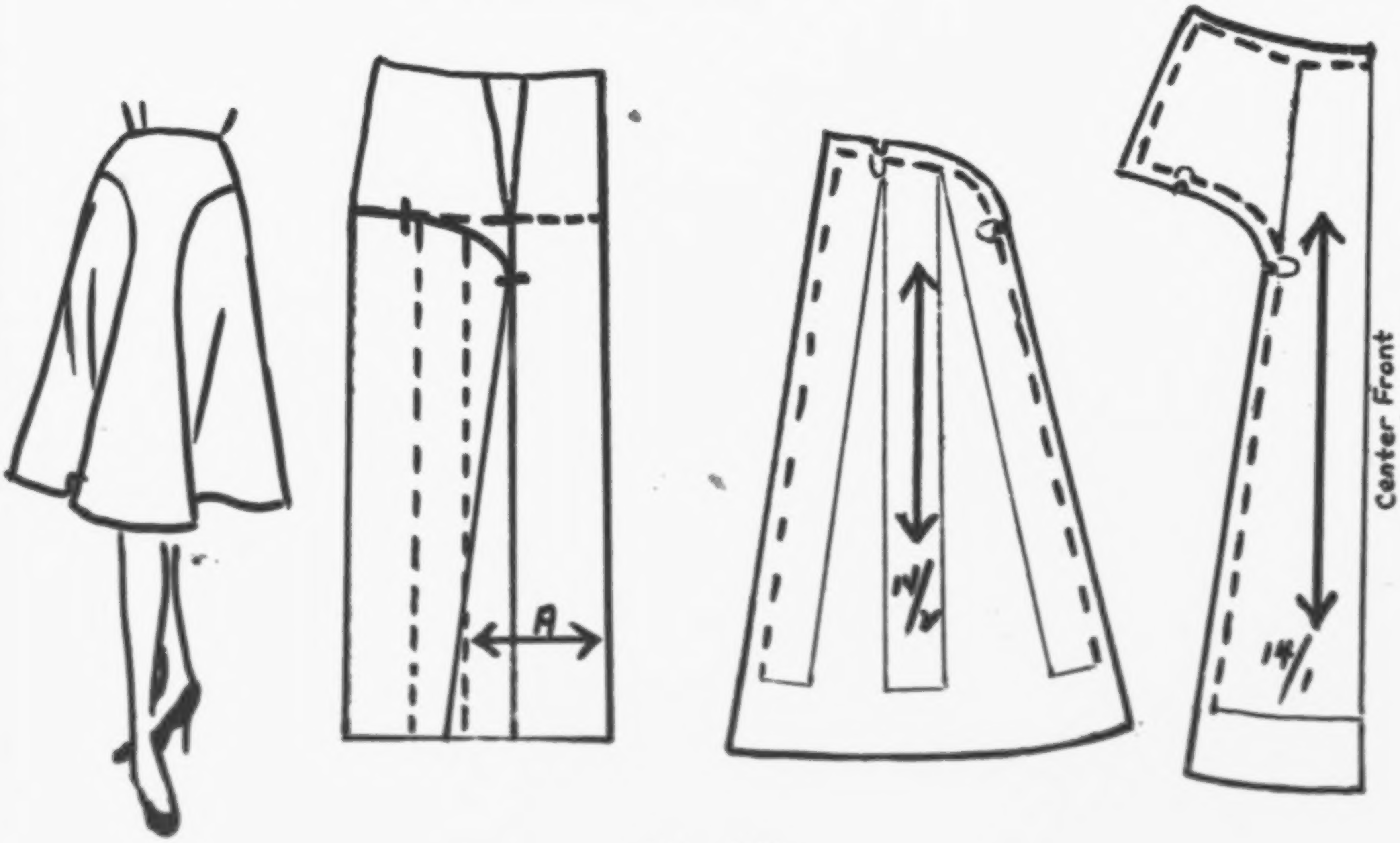


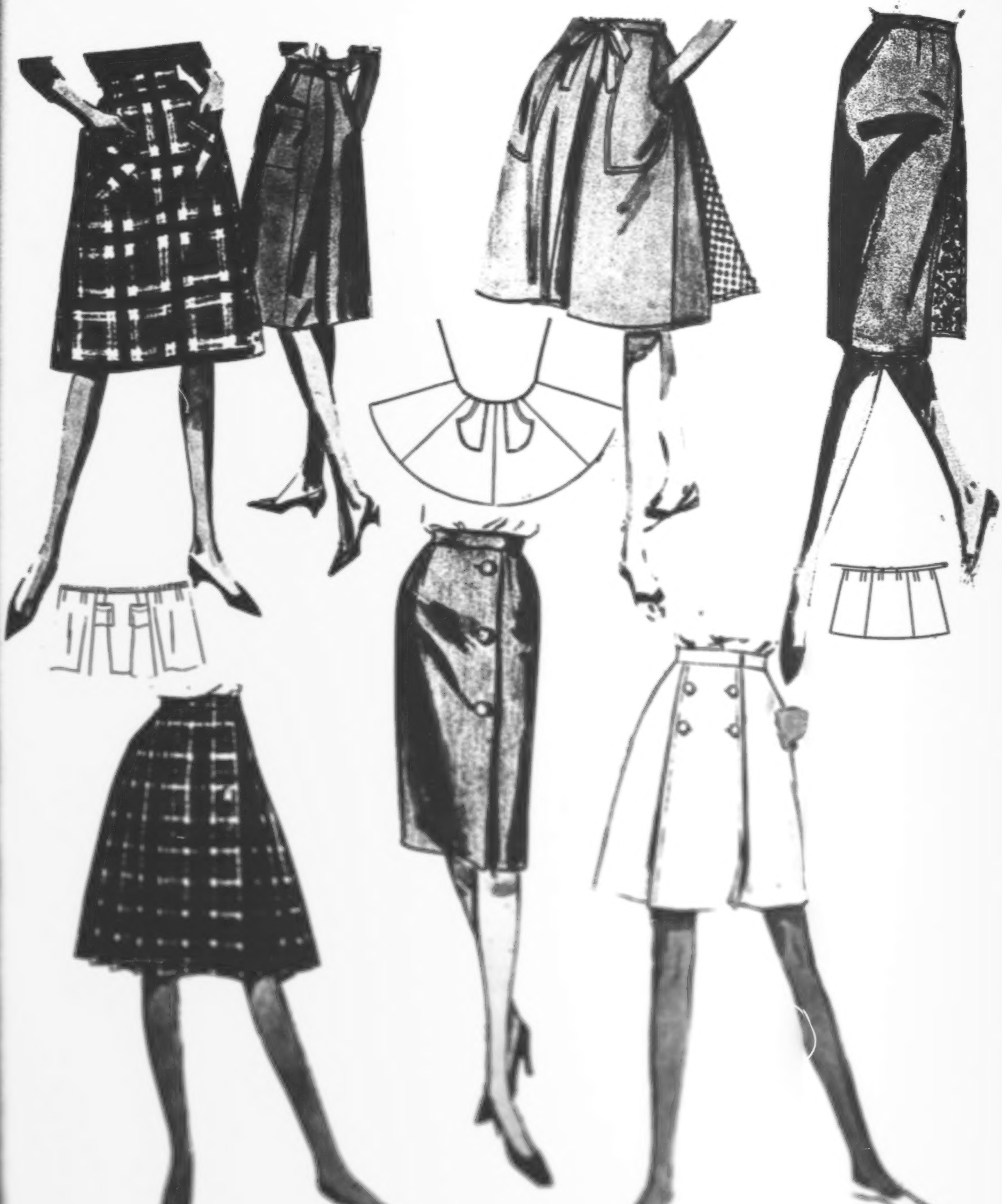
Fig. 239

1. Trace basic front skirt sloper.
2. Plan yoke line--you may use the measurements given you or use your own. Always keep in mind the body lines as shown on the figure.
3. Plan front skirt panel line and flare (A).
4. Determine slash lines in side panel for fullness in skirt.
5. Place crossmarks on yoke and panel for matching.
6. Trace yoke and center-front panel. Add seam allowance, crossmarks, and grainline.
7. Trace side panel with style lines.
    a. Slash style lines and spread to the desired width.
    b. Add seam allowance, notches, and grainline.

ASSIGNMENT:

1. Develop patterns A and B.
2. Make up patterns A and B in muslin.
3. Collect six pictures of skirts with yokes.

The wrap-around skirt



UNIT VIII - SKIRTS

G. Wrap-Around Skirt — Lesson 8

OBJECTIVE: To learn the principles of developing wrap-around skirts.

RELATED INFORMATION:

Wrap-around skirts are comfortable for travel and come under the division of sportswear. Wrap-around skirts are a recurring theme, with reversibility among the newest features. Back- or front-wrap skirts can be made to reverse to another color or design, or the under-panel can be stitched into the side seam for a neat, trim job in motion.

The wrap-around skirt is usually made of gores with extra overlap, either in back or front; or it may be made in one piece. using darts for shaping waistline at front, back and sides. Pleats or gathers may be added to the skirt. The skirt opens flat for easy wrapping around the figure. It is fitted closely at the hipline and waistline. The wrap-around may be worked as a kilt, with fringe trimming at the side hem.

Darts in the wrap-around skirt usually correspond to gore lines or seams. Fewer and narrow darts are needed to flatter the slim figure. The larger the figure and the more rounded it is, the greater will be the difference between the hip and the waist measurements. The darts will be wider and there will be more darts needed for better fit.

PROCEDURE:

Example A. One-piece wrap-around with overlap in front

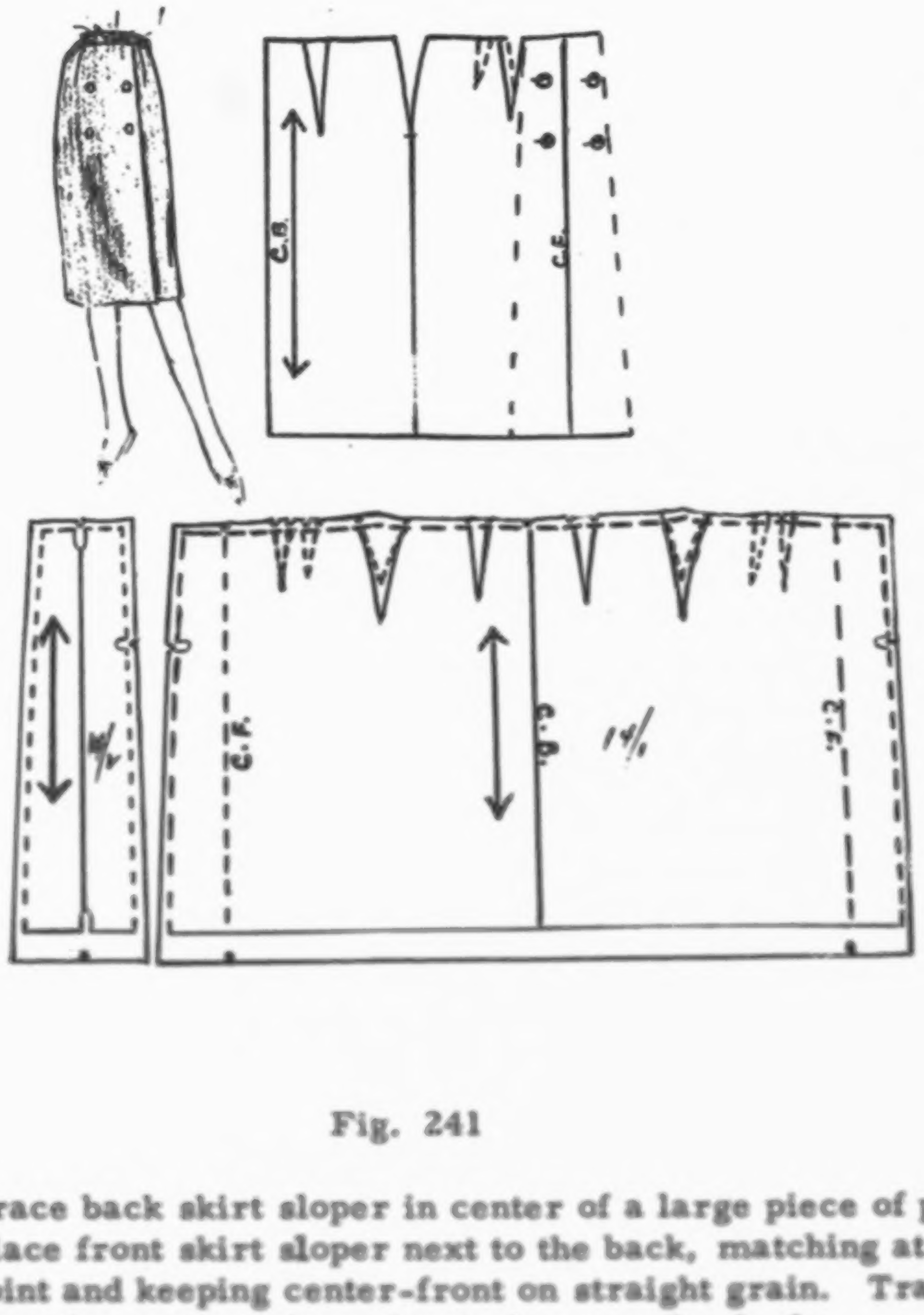


Fig. 241

1. Trace back skirt sloper in center of a large piece of pattern paper.
2. Place front skirt sloper next to the back, matching at the flare point and keeping center-front on straight grain. Trace.
3. Plan the amount of overlap in front on the draft.
4. Fold paper on center-front line and trace overlap.
5. Open overlap and trace complete pattern including overlap. Mark darts in front and back and form darts at the side seams. Shorten openings at side seams so the darts measure 7½ inches. (Do not use more than two darts in back, one at each side seam, and two at each side of the front.)
6. True darts; add seam allowance and notches.
7. Plan a facing for the overlap. This could be either applied or attached, as covered in Unit V, Lesson No. 3.

Example B. Gored wrap-around with overlap in back

This type of skirt usually consists of a two-gore front and a two-gore back with overlap in back. The sweep of the skirt could be any width desired, from the slim skirt to semi-circular fullness.

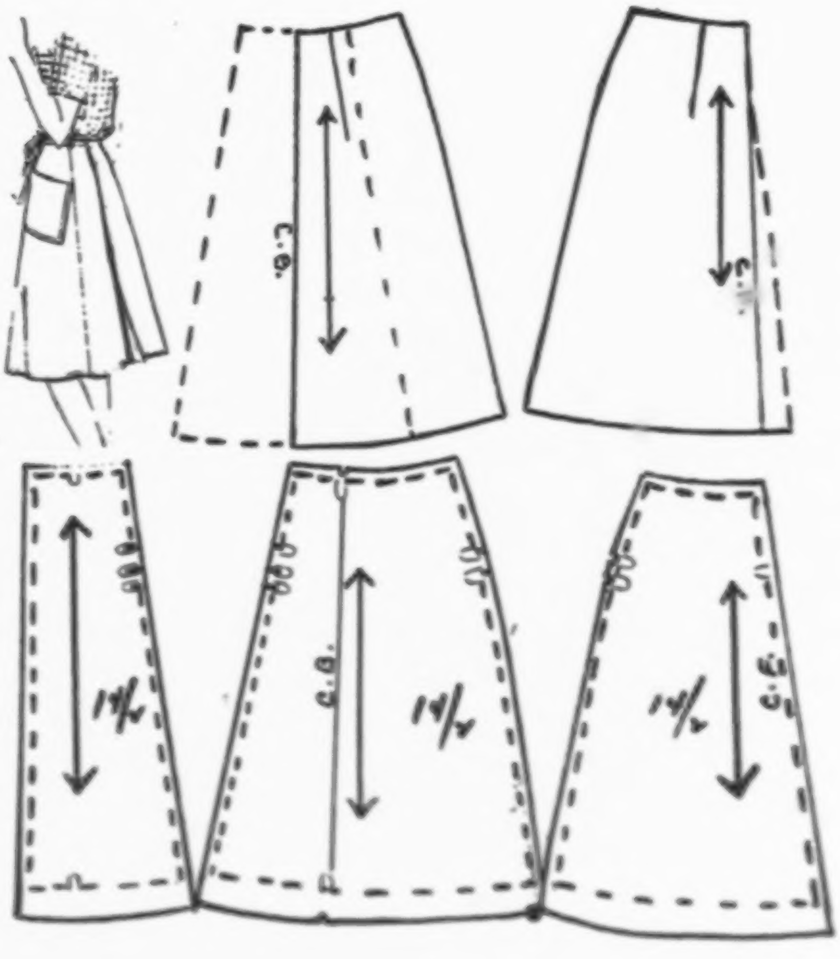


Fig. 242

FRONT:

1. Trace front skirt sloper and swing so that waistline dart is eliminated.
2. Add desired width to the center-front, from nothing at the waistline to at least 2 inches at the hem.
3. Mark grain line parallel to the original center-front fold.
4. (If a one-piece front is desired, no additional width should be added to center-front, and skirt will be placed on a fold.)
5. Add seam allowance, notches.

BACK:

1. Trace back skirt sloper and swing so that waistline dart is eliminated.
2. Plan the amount of overlap on draft. This line should e narrower at the waist and wider at the hem to allow fo more overlap at the bottom.

3. Trace back skirt and line for overlap.
4. Fold paper along center-back and trace complete overlap.
5. Unfold paper at center-back and blend all styling lines.
6. Add seam allowance, notches, grain, etc.
(If skirt is to be completely lined or reversible, seam allowances are added around complete pattern. If unlined, facing should be added to back at overlap and hem allowance added to back and front.)

ASSIGNMENT:

1. Develop pattern A as in lesson.

Develop a wrap-around skirt (kilt) with unpressed pleats, as in following sketch.

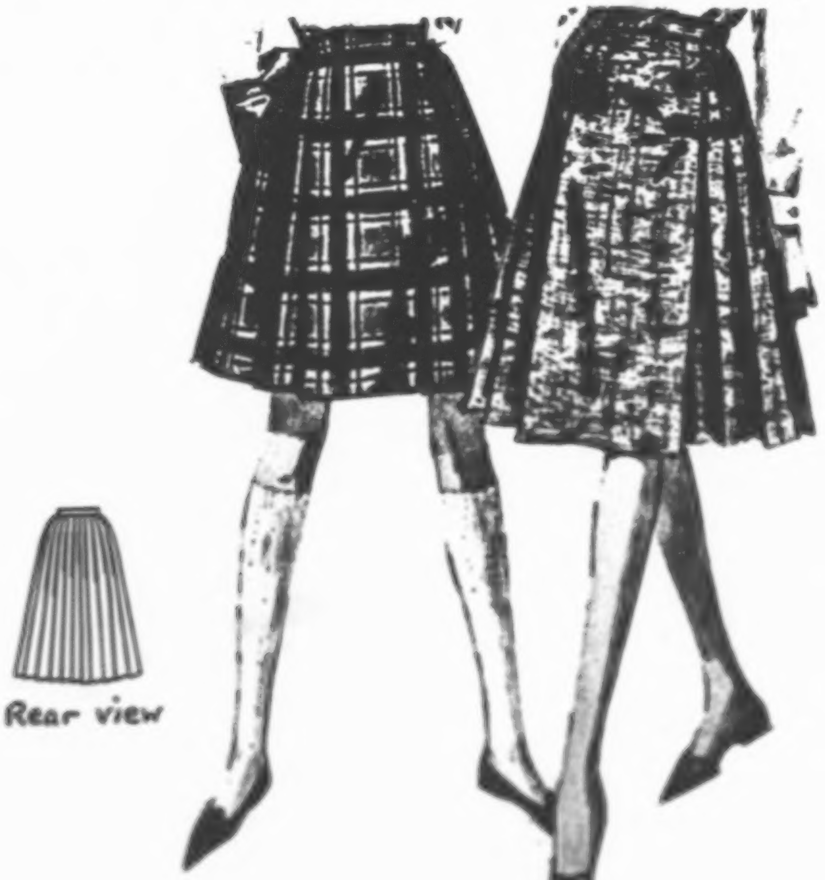


Fig. 243

3. Develop pattern B as a 4-gore and as a 3-gore skirt.

4. Collect six pictures of wrap-around skirts that have some kind of trimming applied to the skirt.

PATCH POCKETS

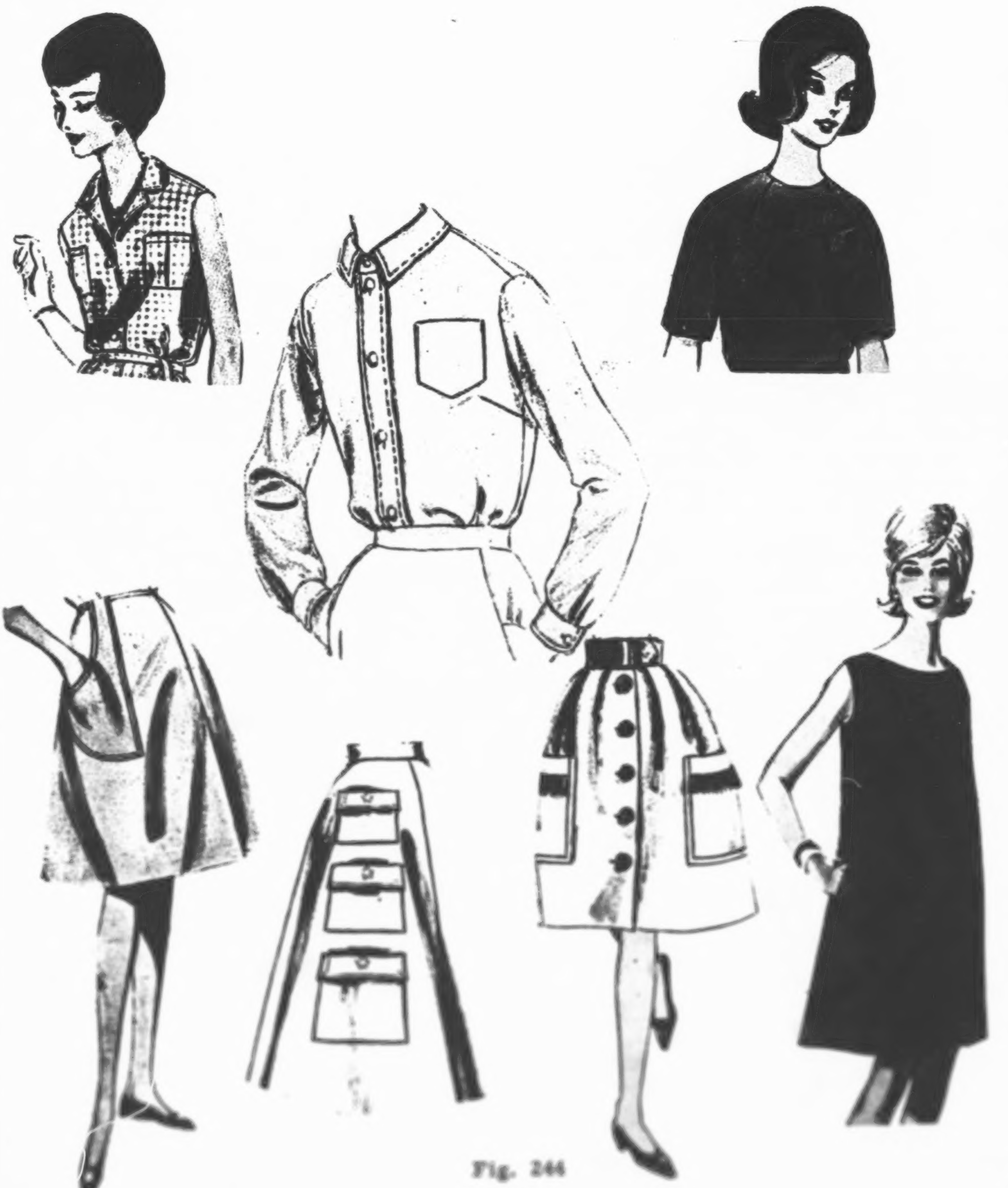


Fig. 244

UNIT IX - POCKETS

A. Patch Pockets Lesson 1

OBJECTIVES: To learn why and how to use pockets in a garment.

To learn how to develop patch-pocket patterns.

RELATED INFORMATION:

Pockets add interesting detail to all types of garments. The patch pocket is merely a carefully planned shape designed to be faced, lined, or edge-finished. It is usually sewn on the right side of the garment. Fashion varies the size, shape, and the placement of the patch pocket. The shape can be square, rectangular, triangular, semicircular, etc. (See Fig. 244.)

Pockets, like fastenings, can serve a decorative as well as a useful purpose. Often they are the only decoration on a dress or jacket. Trimmings such as piping, cording, decorative stitching, monograms, embroidery, or a flap with a button and buttonhole may be added for decorative interest.

If the pocket is really to be used, it should be so placed and so sized that you can get your hand into it. A safe rule to follow for size is to make a pocket with a horizontal or diagonal opening as wide as the fullest part of your hand plus one inch. Make a pocket that opens vertically as wide as the fullest part of your hand plus 2 inches. Place your pocket where you can reach it easily.

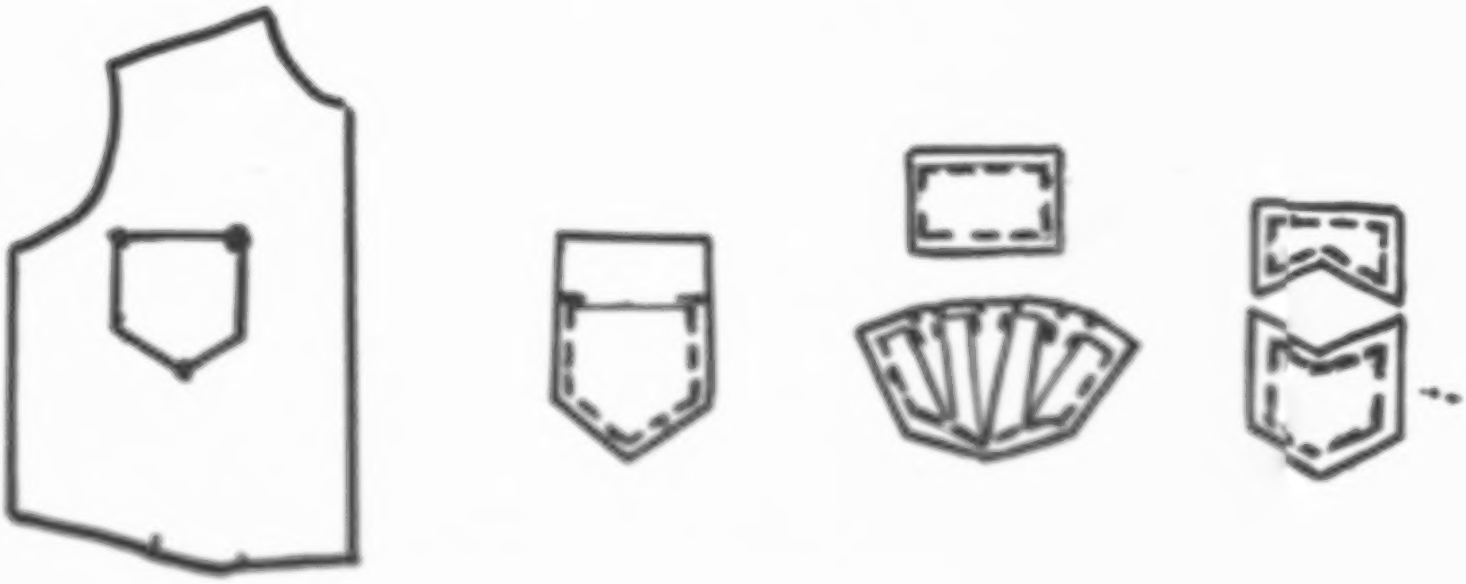


Fig. 245

PROCEDURE:

1. Decide the style, size, and placement of the pocket by experimenting with paper cutouts.

2. Trace the part of the basic sloper that will have the pocket attached.

3. When you have decided what you want, sketch the pocket on your tracing.

4. Lay paper under the pocket area and using a tracing wheel trace the outline of the pocket.

5. Make any style changes to this piece you may wish.

    a. For style interest you may do anything to the patch pocket that you have learned to do with a bodice or skirt. For example, you can divide the area, add fullness, add a flap and button, add a band, use the grain as part of the design, or trim it.

    b. For a straight pocket edge, add the hem, seam allowance, grain, and fold indicator.

    c. For a shaped pocket edge, add a shaped facing, seam allowance, grain, and notches.

ASSIGNMENT:

1. Design a rectangular pocket and complete pattern.

2. Design a pocket with fullness and an attached band, and complete the pattern.

3. Collect six pictures of pockets--different placement, styles, sizes.

POCKETS IN A SEAM OR STYLE LINE

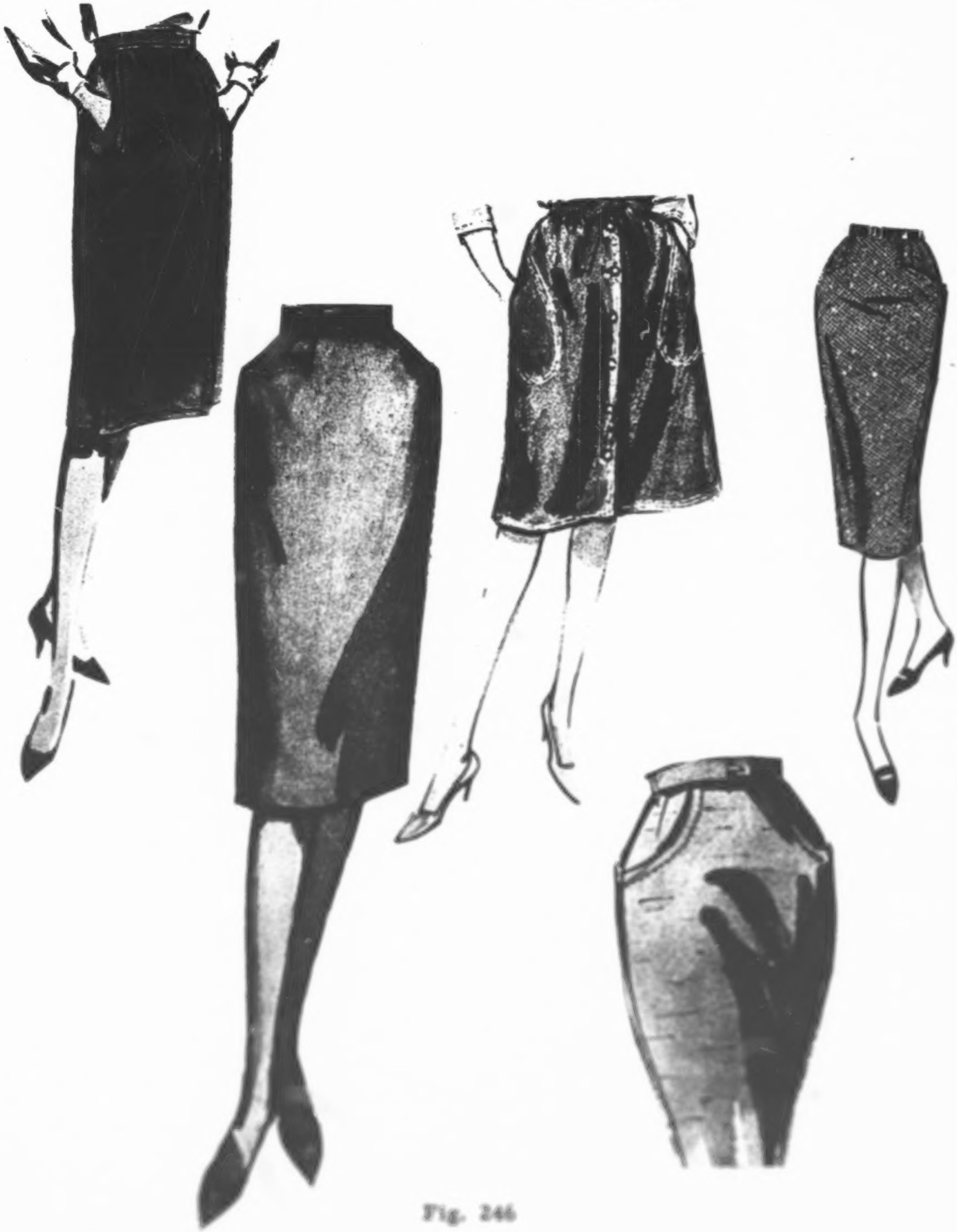


Fig. 246

OBJECTIVES: To become familiar with pockets that may be set into a bodice or skirt.
To learn how to make the pattern for set-in pockets.

RELATED INFORMATION:

The set-in pocket is one that is concealed in a basic seam-joining or in the seam of a style line, such as the seam joining yoke and bodice, or two sections of a skirt. Any sections which need to be joined by a seam can be utilized for this purpose. The set-in pocket may also be sewn into a slash in the material. (See Fig. 246)

The opening for a pocket may be straight or curved. One of the most popular set-in pockets is the kind sewn into the hip seam of skirts, slacks, or shorts. The pocket is sewn into the right side seam, leaving the left side free for easier application of a zipper placket.

In the early 1960's many designers introduced a 3-panel skirt with pockets sewn into the front panel seam. This casual skirt was usually gathered at the waist.

A simple pocket to cut and make consists of two identical pieces shaped as in A, two inches or three inches longer than the pocket opening, to allow for some depth. There are two types: (A) the pocket stitched into a seam (usually a side seam and the waistline) and (B) the pocket stitched only into a seam. The pocket may be made of self-fabric, lining fabric, or lining fabric with facing of self-fabric.

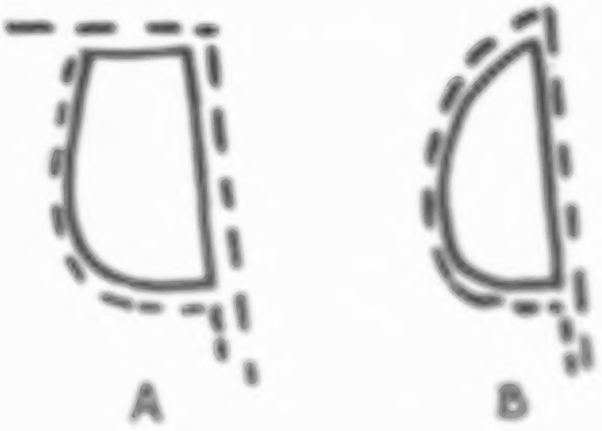


Fig. 247

Example A. Pocket set into the side seam

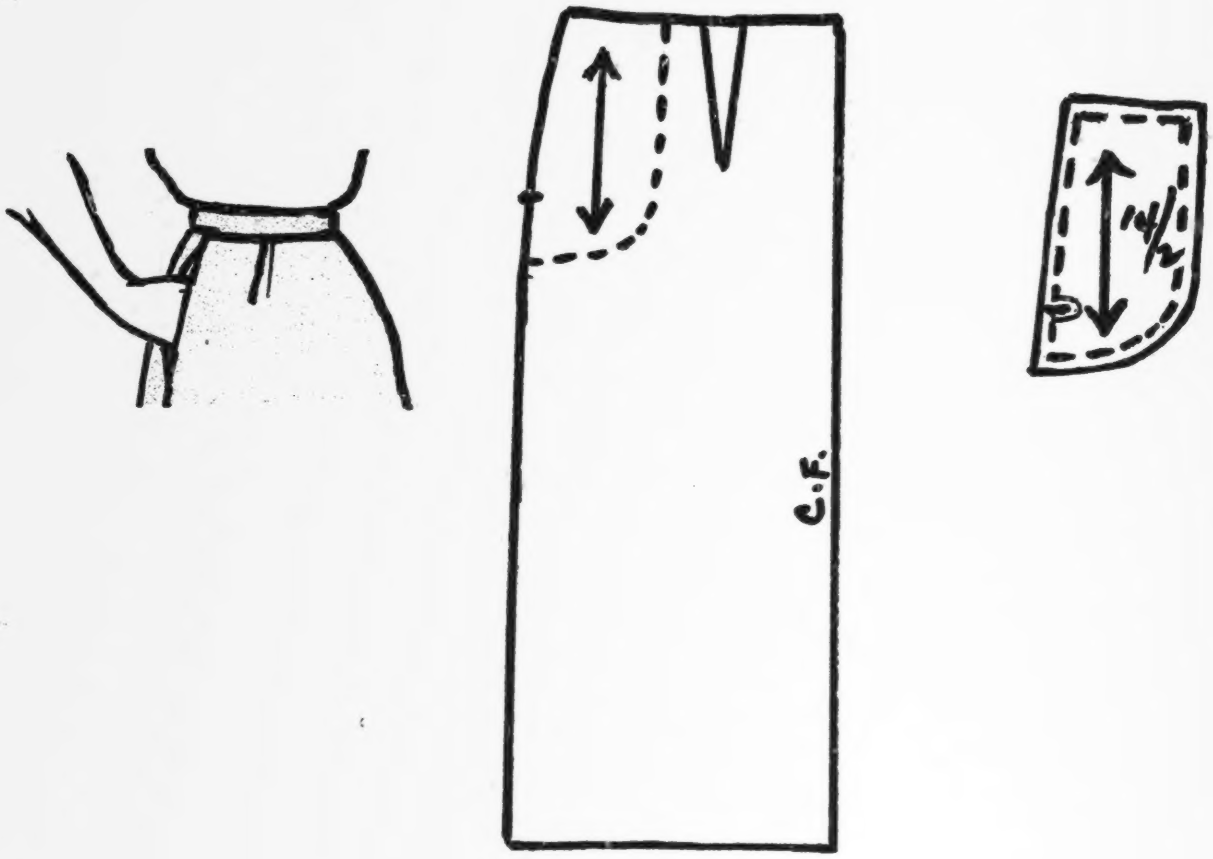


Fig. 248

1. Trace the skirt pattern.
2. Draw in the size, shape, and placement of the pocket.
3. Crossmark the point at which pocket and seam join.
4. Trace the pocket.
5. Add seam allowance, notches, grain.

Example B. Bodice pocket set in a style line

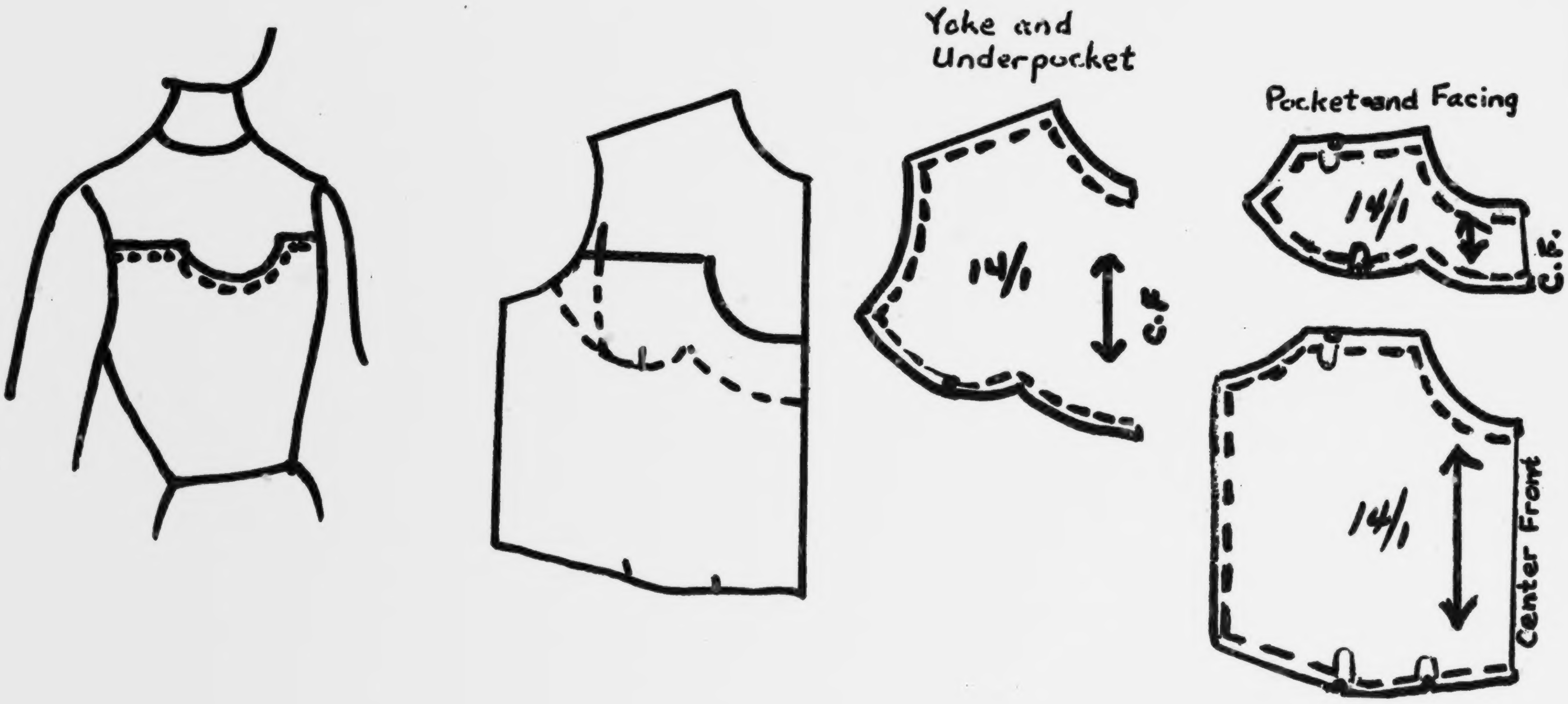

Yoke and Underpocket
14/1
C.F.
Pocket and Facing
14/1
C.F.
14/1
Center Front

Fig. 249

1. Trace basic front sloper.
2. Draw in style line.
3. With dotted line, draw in the size, shape, placement of the pocket and facing for the lower section.
4. Crossmark the point at which the facing will join the lower section.
5. Crossmark the point at which pocket will join lower section.
6. Trace the upper section of the bodice, including the outline of the pocket and facing for the lower section.
7. Trace the lower section from the style line down.
8. Add seam allowance to the lower section.
9. Trace the facing and pocket in one.
10. Add seam allowance and notches to facing.

Example C. The skirt pocket in a style line

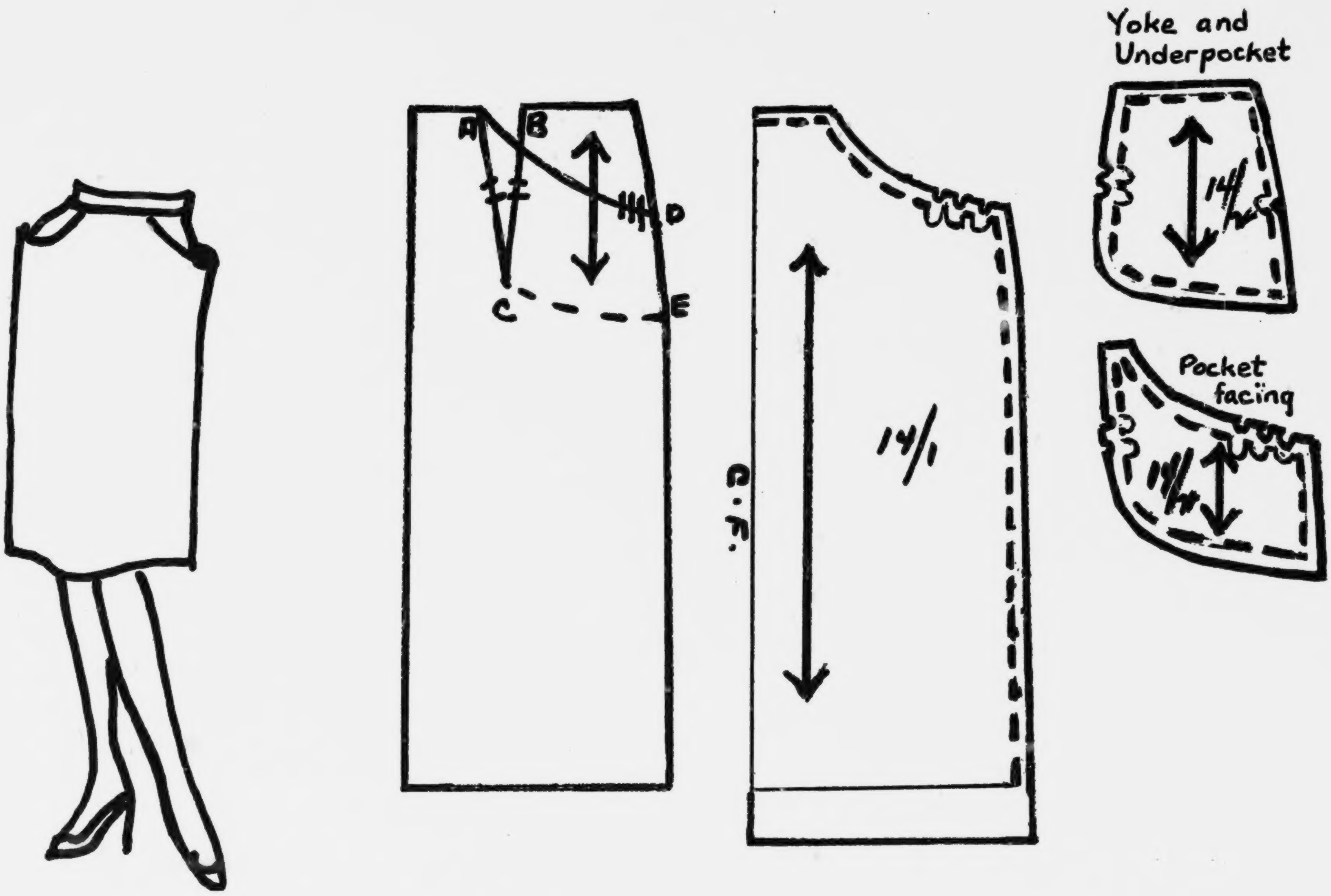


Fig. 250

The skirt pocket is made in the same manner as the blouse pocket. The pocket can be made to stand away slightly by utilizing the dart control. As you can see, in this example the under-pocket is an extension of the skirt yoke; the upper pocket is a facing of the style line. The skirt front contains unstitched dart control. The dart control is stitched in the seam joining the skirt yoke and the pocket facing. The effect is a smooth fit over the hips and a pocket which stands away slightly from the yoke.

1. Trace the skirt-front sloper.
2. Draw the style line (AD), using the dart control for inner end of style line.
3. Label dart points (A, B, C).
4. Locate grain line near side seam through style line. (This will give you the proper grain line for the upper section and the pocket facing.)

5. With a dotted line, mark out the pocket. Be sure to allow enough depth for hand. It will have one straight side (the dart leg A to C) and continue to side seam (E).
6. Mark notches on the dart, pocket, and style line.
7. Trace the skirt-front pattern--center-front, waistline, style line, side seam, and hem. Trace notches & grain; add seam allowance.
8. Trace the pocket facing from (A) to (C) to (E) to (D), and the style line back to (A). Trace the notches and grainline.
9. Trace the yoke--the dart leg (BC) to (E), the side seam, and the waistline to (B). Trace the notches and grainline. Note that there is no dart control in this piece. When the yoke is stitched to the pocket facing (at AC), notches matching, and the two stitched to the skirt front, the dart control will be closed in the yoke seam.
10. Add seam allowances to all pieces.

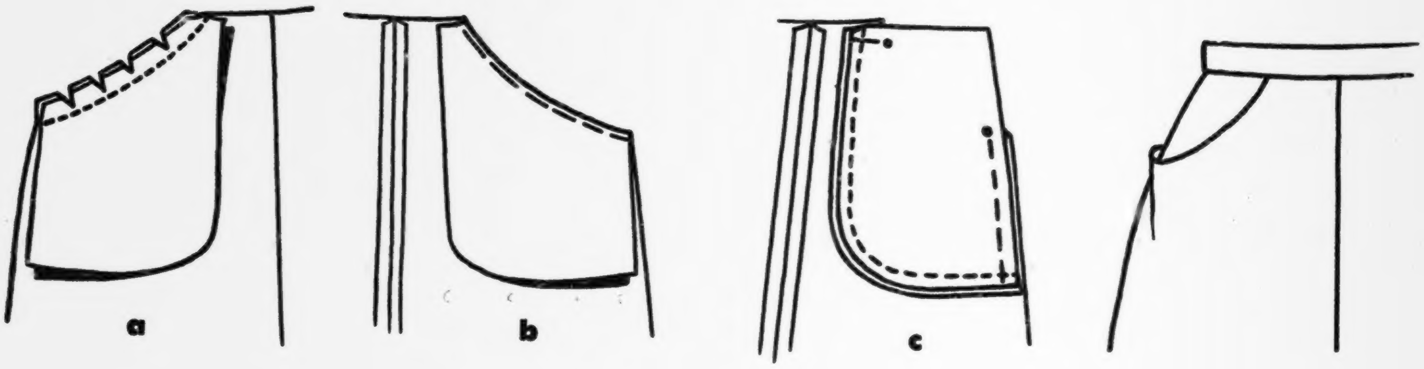


Fig. 251

ASSIGNMENT:

1. Develop a pocket set into a front bodice, using an original design.

2. Develop a set-in pocket in a skirt, using an original design.

3. Collect six pictures of skirts or bodices with pockets that are part of the style line.

NO BOUNDS FOR BELTS

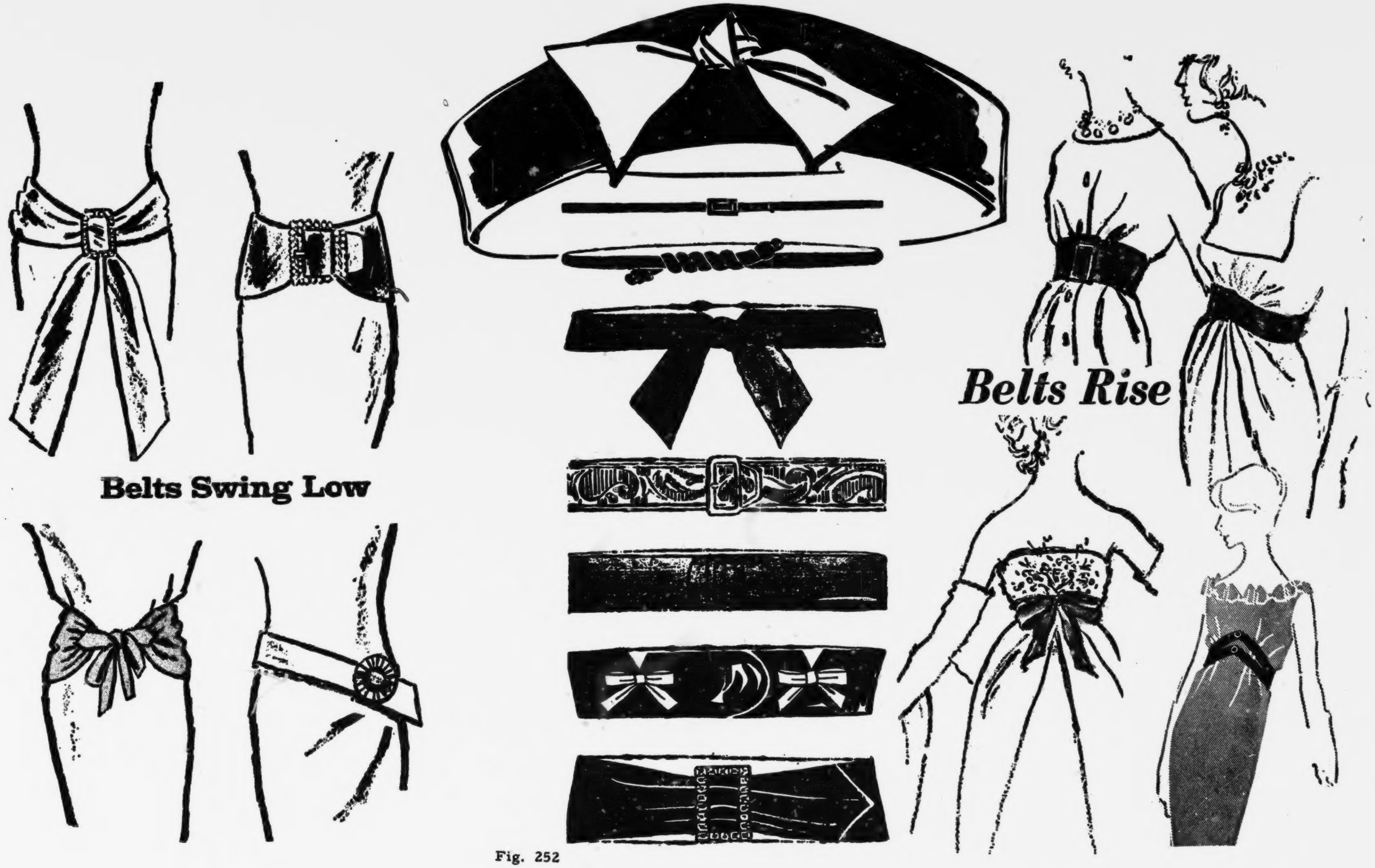

Belts Swing Low
Belts Rise

Fig. 252

UNIT X - BELTS

A. Skirt Bands, Ties, and Straight Belts — Lesson 1

OBJECTIVE: To learn to draft straight belts, bands, and ties.

RELATED INFORMATION:

Belt patterns must be made for all fashion designs that include a self belt, a skirt, a band, or any tie that will be inserted in seams or needed to finish a garment. Even though in most cases the belts or bands are just simple rectangular pieces, a pattern must be made so that it will be included in the marker.

If the belt is made in a novelty fabric, leather, or fur, the fabric for this will be supplied by the beltmaker who also makes the patterns and produces the belts. The dress manufacturer buys the belts ready-made from the beltmaker.

Many times, to create interest in a garment, the belt becomes the new fashion feature. The belt was used to give a new look to the simple chemise of 1957, or to the sack, as it was later known, and then to the shift. The belt can be pencil-slim, of capeskin, patent leather, plastic, or fabric, and finished off with a buckle, bow, or just snaps. Another style of straight belt that continually returns in fashion is the tie sash, which can be just knotted or bowed. This can be wide- to be crushed-or narrow (shoestring), ending in tassels or gold metal tips. The very narrow ties can be worn singly or in groups of two or three.

The self-fabric belt is cut on the length of the fabric, on the straight-of-grain. The width depends on the fashion; for example, belts used on large-size women's dresses will tend to be narrower than belts used on junior dresses.

Bands, straps, and ties cut of straight pieces are often needed to finish off a pattern. As a rule they set and finish better if cut lengthwise. The bias can be used if a soft drape is desired. However, this would be good only for garments that will be drycleaned.

PROCEDURE:

Example A. Self-material skirt band

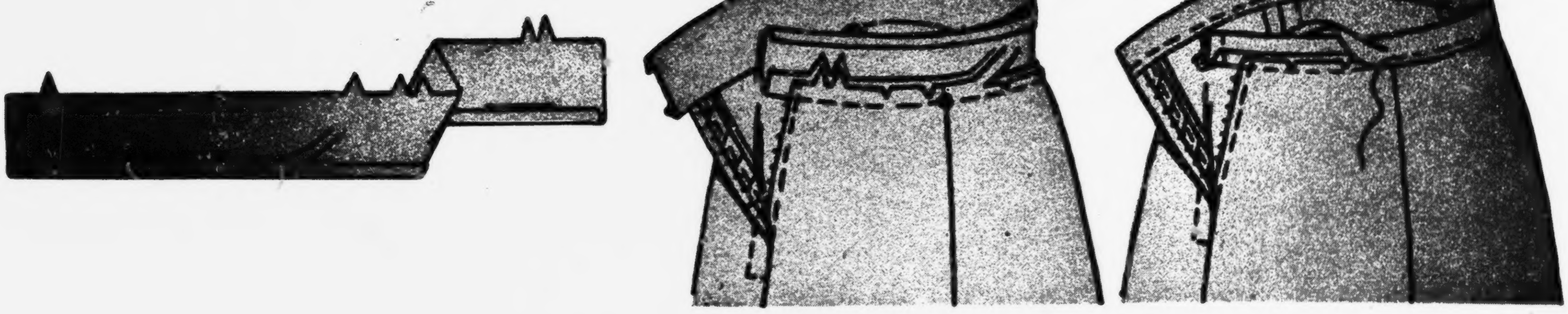


Fig. 253

I. Determining length of waistband pattern

The length of the waistband is equal to the waist measurement plus ½" for ease, plus one inch for extension, plus seam allowances. For example: the length of the waistband for a 24" waist will be

24" - waist measurement
½" - for ease
1" - for extension
1" - for seam allowances (two at ½")
26½" - total

II. Determining width of waistband pattern

Waistbands 1" to 1½" are satisfactory for fit. The one-inch will hug the waist better. If waistbands are wider than this, some shaping is necessary to fit the curve of the waist.

III. Developing pattern for a one-inch waistband to fit a 24" waist

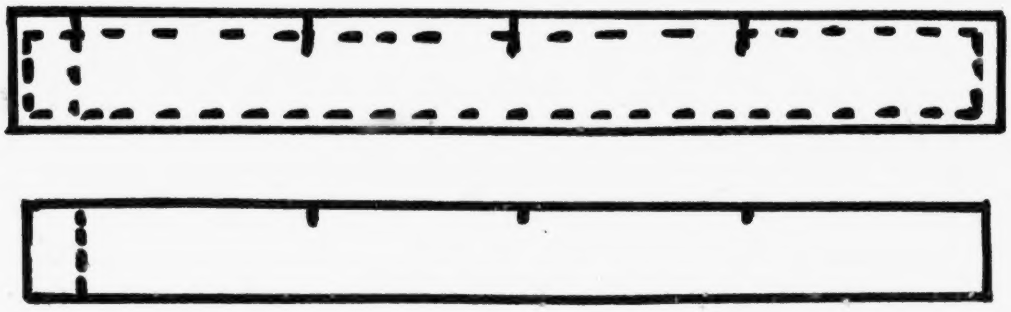


Fig. 254

1. Draw a line the length of the waist measurement plus all the allowances listed in I.
2. Square a line the twice desired width for band (2") on both ends of the line.
3. Draw a line parallel to the waist length and 2" from it.
4. Add seam allowance.
5. Mark off extension (1").
   The front end of the belt should finish flush with the left underarm seam or placket edge. (If the placket opens at center-front or center-back, the extension should be right over left as the garment is worn.) The extension is always placed beyond the back edge.
6. Mark center of belt for fold line.
7. Place notches at center-front, center-back, and side seams. These should correspond with basic sloper, placing the extra ease from right-front dart position to right-back dart position. There should be no ease in the center front or center back.
8. Mark grainline. Skirt bands are usually cut on the lengthwise grain.

Example B. Belt--self-fabric with self-buckle

Most fabric belts are finished with a backing. They are usually made by special firms that make belts. When sending belt fabric to the beltmaker, it is important to cut the belt strip long enough for overlap, plus a piece of fabric for the buckle.

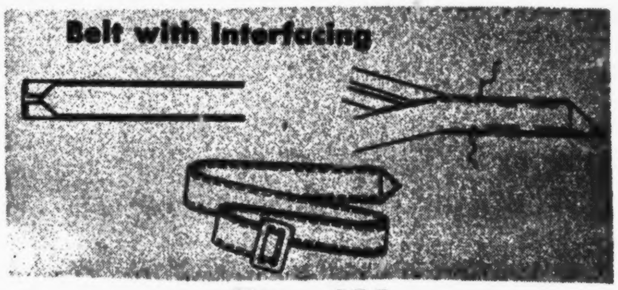


Fig. 255

Mark a piece of paper equal in length to the waistline plus 6 inches and twice as wide as the desired finished size. The extra length provides for attaching the buckle and the overlap for eyelets. Example:

Waistline - 24"
Finished width desired - 1 inch
Belt strip will measure:
    30" long (24" for waistline plus 6")
    2" wide (twice the desired width)

ASSIGNMENT:

1. Develop a belt for a 26" waist, $1\frac{1}{2}$-inch finished width.
2. Develop a skirt band for a 28-inch waist, $1\frac{1}{4}$ inch in width.
3. Develop a sash, a tie, and a bow and make them all up in muslin or any cotton fabric available.

B. Shaped or Contour Belts — Lesson 2

OBJECTIVES: To learn how to develop contour belt patterns.

To apply principles of designing in the styling of belts.

RELATED INFORMATION:

In the garment industry there are special firms that design and manufacture belts. These firms develop "lines" every season, which they present to clothing designers, who in turn make a choice for their original dress models. Designers may also design original belts and then turn them over to belt manufacturers to produce them.

Belts are also a very popular accessory item in boutiques and notion departments in most large stores. During the gift season many expensive belts made of novelty fabric, such as gilded leather or rich brocades, and trimmed with fine jewels or antique buckles, are on sale in better shops. They may be straight, shaped, or crushed, depending on the fabric and the type of dress the belt is designed for.

Belts are used on most dresses from the simplest sports clothes to the dressiest evening clothes.

In the previous lesson you developed straight belts for skirts or dresses. The contour belt is one that is shaped to fit around the waistline of the figure. The shape of the contour belt should harmonize with some other feature of the dress but should not be too obvious a repetition. Contrasting textures and colors frequently are smarter than the belt made of self-fabric.

PROCEDURE:

Example A. Contour belt (single)

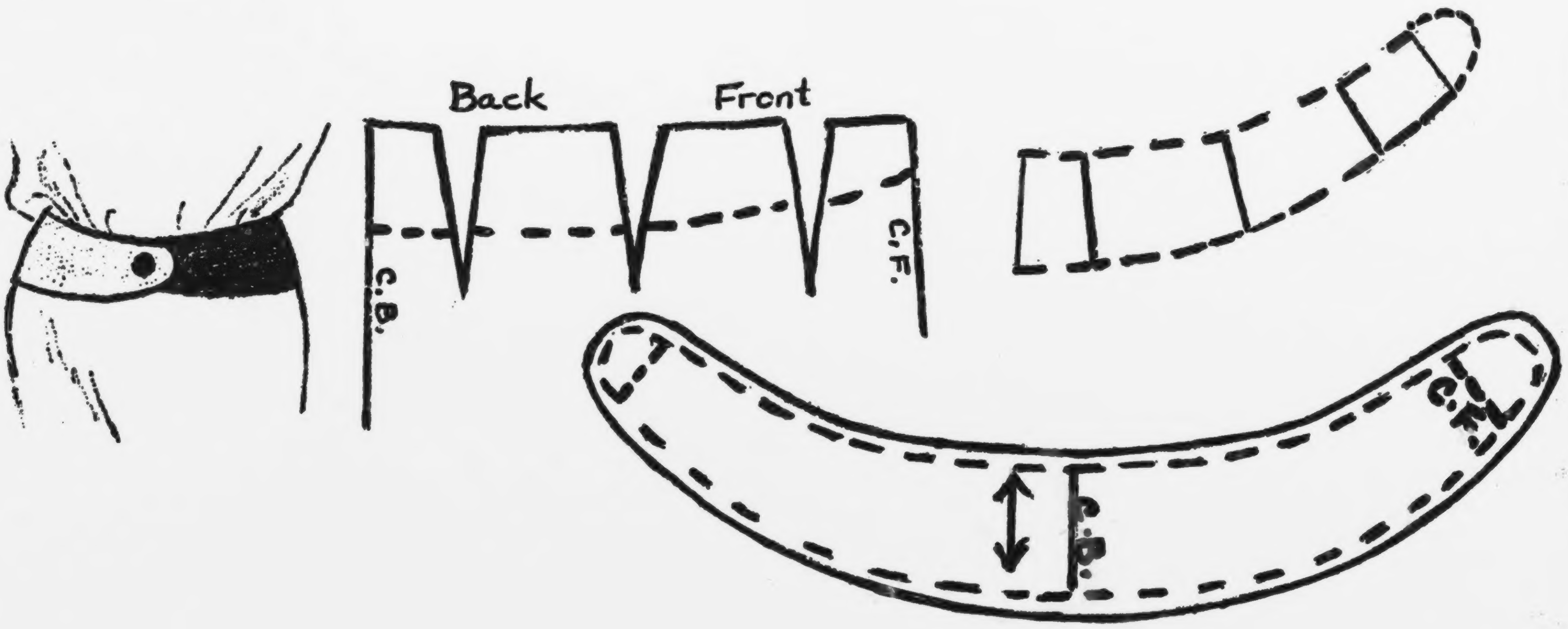


Fig. 256

1. Trace the waistline and the top few inches of the front skirt sloper.
2. Trace the waistline and the top few inches of the back skirt sloper.
3. Pin the darts closed.
4. Join the front and back tracings at the side seam.
5. Draw in the design line of the contour belt. (This is usually narrower in front than in back).
6. Add enough for the overlap on the right front, usually 3 inches in addition to the waist measurement, continuing the curve of the design line.
7. Trace the complete pattern, matching left extension to right overlap. Add seam allowance.

Example B.   Girdle or double contour belt

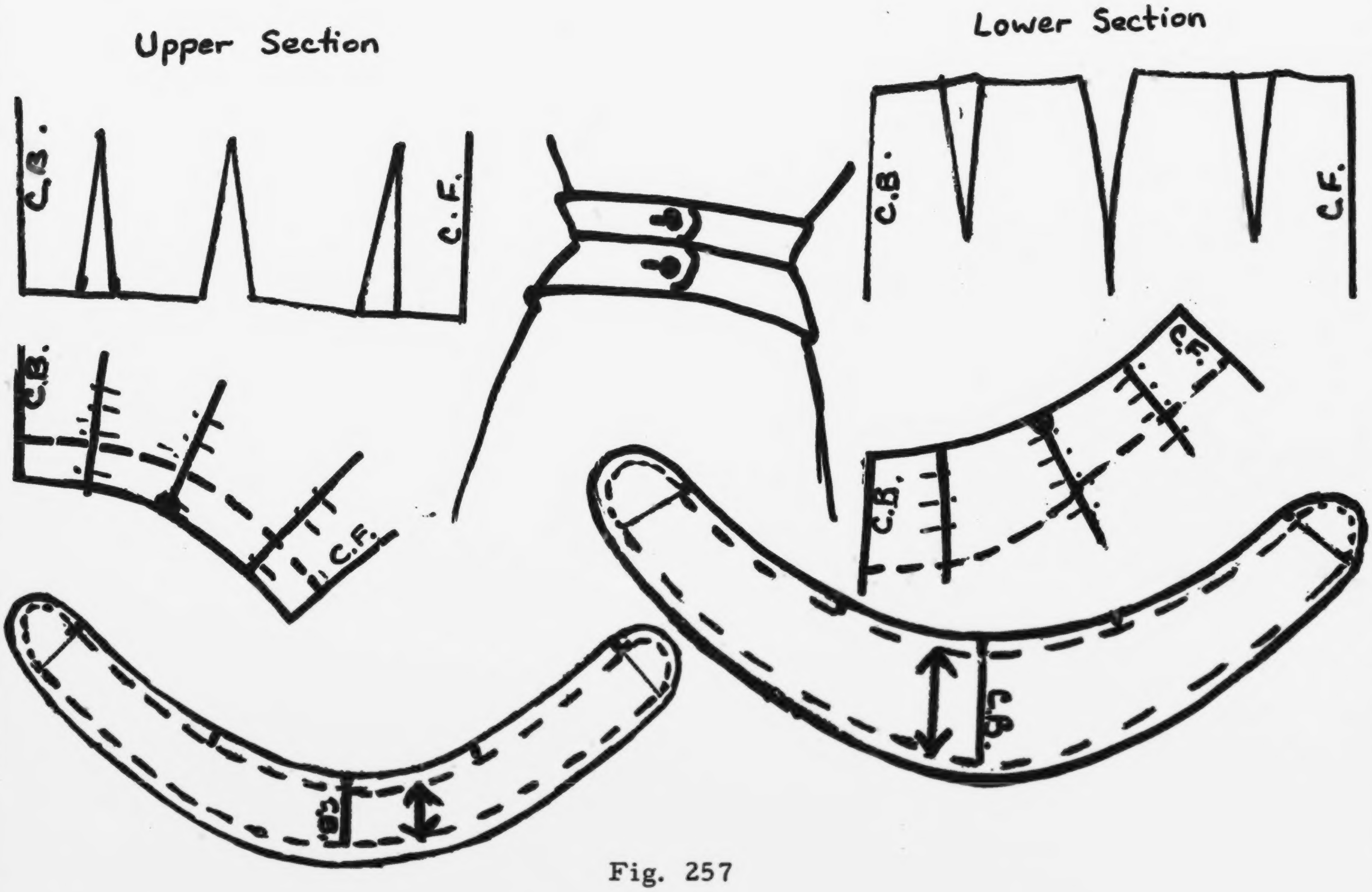


Fig. 257

Shaped girdles and cummerbunds may be made in two pieces with normal waistline. They would be made of two contour belts, one made for the bodice and the other for the skirt and joined at the waistline.

1. Use the directions above for the skirt part of the belt.
2. Torso belt:
   a. Trace the waistline and the bottom few inches of the bodice back and front slopers.
   b. Pin the darts closed.
   c. Join the front and back tracings at the side seam.
   d. Draw in the design line of the contour belt.
   e. Add enough for the overlap on the right front, usually three inches, continuing the design line.
   f. Trace the complete pattern, matching left extension to right overlap. Add seam allowance.

ASSIGNMENT:

1. Develop the two belts in this lesson.

2. Collect six pictures of contour belts.

3. Design two belts for sportswear. Make one for leopard fur and one for stitched calf.

4. Design a soft suede and a patent leather belt to be worn with afternoon dresses.

5. Design two evening belts.

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UNIT I - INTRODUCTION TO PATTERNMAKING AND DESIGN

TEST I - A

PART I. MATCHING (Value 2 points each; total 30 points)

Directions: Column A lists some marking symbols and terms etc. Column B contains the definitions or information relating to Column A. In each blank, place the letter of the definition that corresponds to the term.

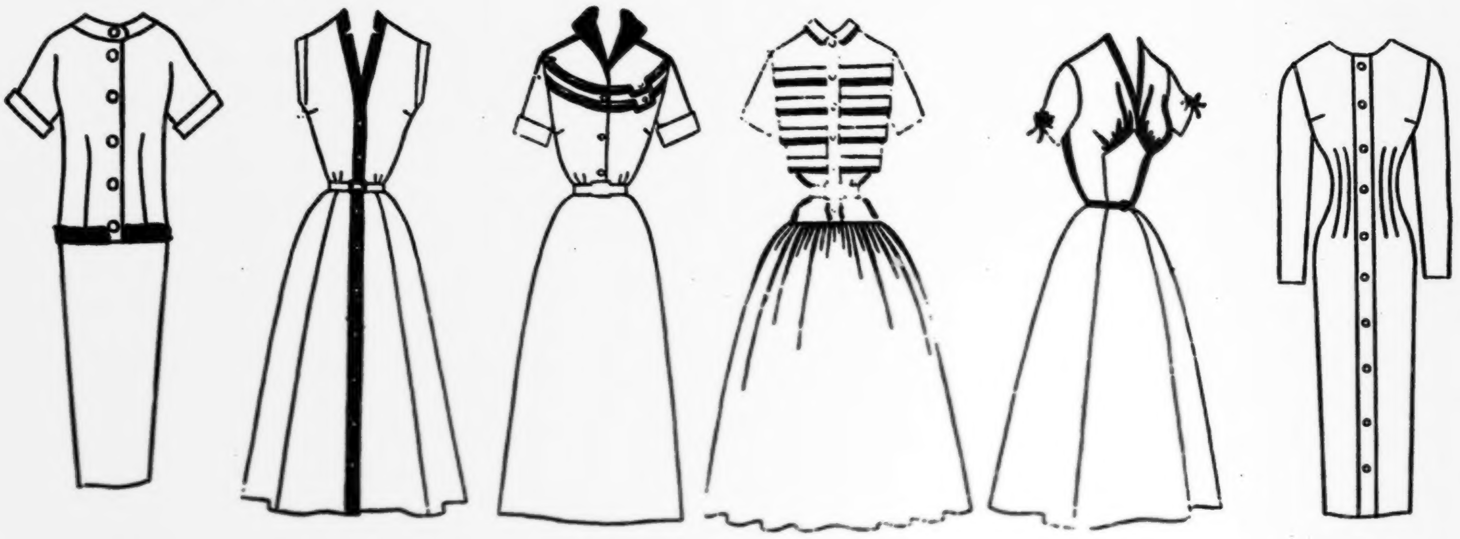
		Column A		Column B
____	1.	plain weave	a.	two or more yarns in both warp and filling
____	2.	dart-tuck	b.	line that suggests dignity and strength
____	3.	diagonal	c.	texture or feel of cloth
____	4.	bodice	d.	shaped set-in section
____	5.	fiber	e.	a fold in the fabric that releases fullness
____	6.	basket weave	f.	waist
____	7.	vertical	g.	each filling yarn passes successively over and under each warp yarn
____	8.	marker	h.	slanting lines from corner to corner
____	9.	gore	i.	a corner formed when a vertical and a horizontal line meet
____	10.	tuck	j.	adds width to the figure
____	11.	hand	k.	produces a diagonal line in the cloth
____	12.	horizontal line	l.	another word for layout
____	13.	pleat	m.	released dart
____	14.	right angle	n.	thread or filament to be spun or woven into cloth
____	15.	twill weave	o.	a stitched fold for trimming

PART II. Identifying line and its effect on shape.

(Value 3 points for each correct answer: total 54 points)

Working with the dress styles sketched below (Fig. 43), answer the following three questions for each of the styles:

1. Identify the principal line.
2. List the effects of this particular line.
3. For what type of figure is the style particularly suitable?



A Style 100 B Style 200 C. Style 300 D Style 400 E Style 500 F Style 600

Fig. 43

PART III: ESSAY (Total points 16)

1. Describe one of the following styles sketched. (Fig. 44.) (6 points)

2. Name all pattern pieces for the style you have described in the above question. (5 points)

3. For the same style list the marking symbols that should appear on the skirt pattern pieces. (5)

4. For additional credit, describe fabric, color, and trimmings you would select for this style.

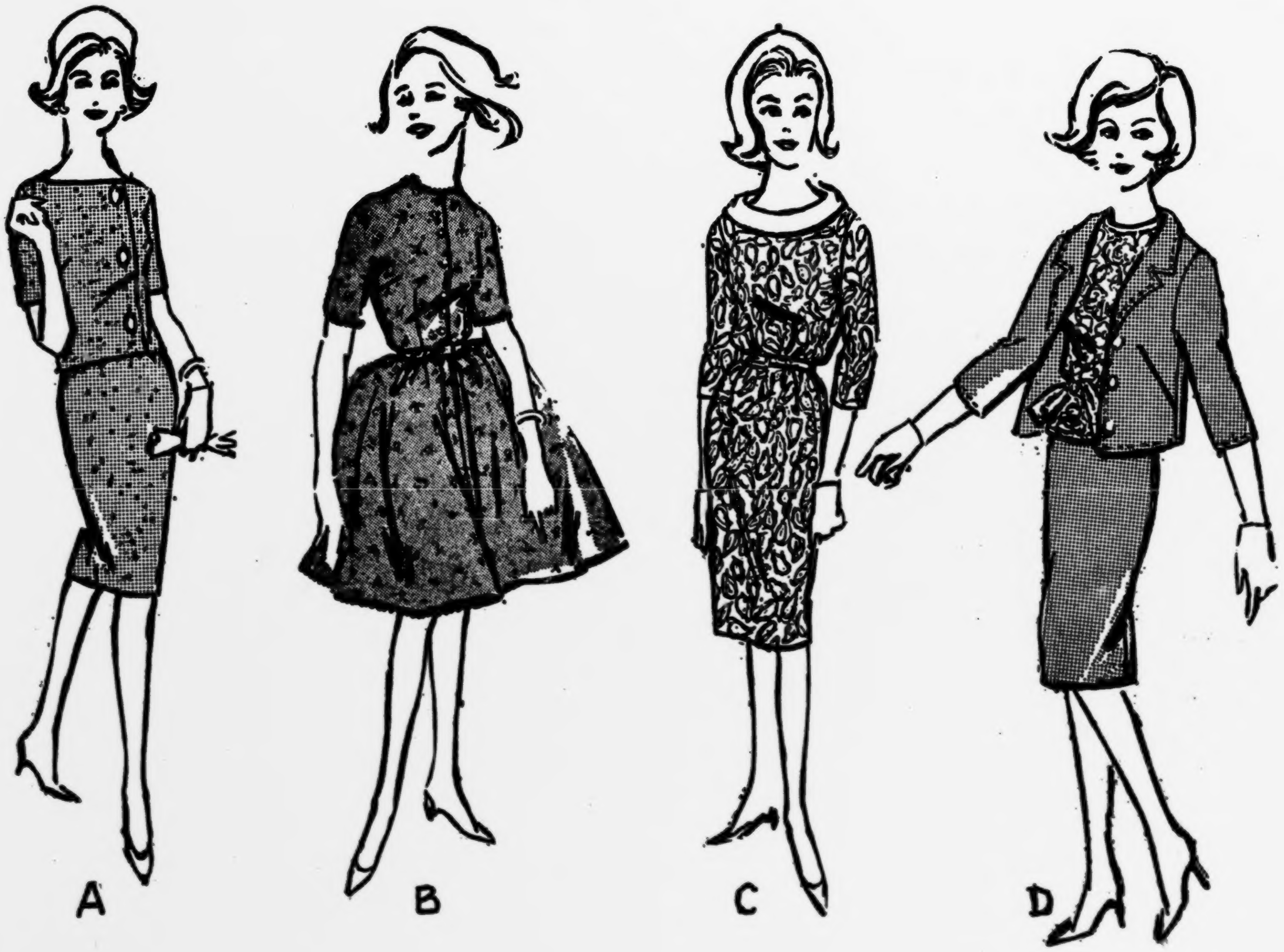


Fig. 44

UNIT I - INTRODUCTION TO PATTERNMAKING AND DESIGN

TEST I - B AND C

PART I. TRUE - FALSE

____ 1. A tape measure is 35 inches in length.

____ 2. Tailor's chalk is seldom used for transferring pattern markings to fabric.

____ 3. Hip measurement is usually taken 7" below the natural waistline.

____ 4. "Ply" in the cutting department refers to the twist of the yarns in the fabric.

____ 5. "Draping" muslin comes in different weights.

____ 6. Markers are usually made on paper, but for duplicate samples, markers are made directly on the fabric.

____ 7. Model forms used by designers should be replaced with every major fashion change.

____ 8. A layout is a diagram showing arrangements such as pieces of pattern on fabric.

____ 9. $\frac{5}{8}''$ is more than $\frac{1}{2}''$.

____ 10. $\frac{1}{4}$ of 37 is $9\frac{1}{8}$.

PART II. COMPLETION

1. Dressmaker pins should be purchased in sizes (a) ____, (b) ____, and (c) ____.

2. A tool used for measuring fabric would be a __________.

3. Because of the curves of the body, a __________ is the best device for taking body measurements.

4. $\frac{1}{3}$ of $\frac{3}{4}$ equals ______.

5. If the front bust measurement is 17", the pattern half will measure __________.

6. $\frac{1}{3}$ of $2\frac{1}{4}$ equals __________.

7. Wool fleece is cut with the nap going __________.

8. When brilliant color is desired, velveteen is cut with the nap going __________.

9. Give the amount of additional material to be allowed for one tuck or pleat in the following:

	Size of tuck	Extra material		Size of pleat	Extra material
a.	$\frac{3}{16}$"	________	e.	1" pleat with $\frac{3}{4}$" underlay	________
b.	$1\frac{1}{8}$"	________	f.	$\frac{7}{8}$" pleat with $\frac{5}{8}$" underlay	________
c.	$\frac{1}{8}$"	________	g.	$1\frac{1}{4}$" pleat with $\frac{7}{8}$" underlay	________
d.	$\frac{5}{8}$"	________	h.	1" pleat with 1" underlay	________

PART III. MULTIPLE CHOICE

____ 1. The weave used in muslin is a (a) basket weave, (b) plain weave, (c) leno weave, (d) twill weave.

____ 2. If the waist measurement of a full-scale model form is 26 inches, the measurement for the waist in the quarter-scale form will be: (a) 6 inches, (b) 13 inches, (c) $6\frac{1}{2}$ inches, (d) $6\frac{1}{4}$ inches.

____ 3. In shortening a bodice pattern $\frac{7}{8}$", the tuck or fold will measure (a) $\frac{3}{8}$", (b) $\frac{6}{16}$", (c) $\frac{1}{2}$", (d) $\frac{7}{16}$".

____ 4. The ratio of $2\frac{1}{2}$ to 1 is equivalent to (a) 55:22, (b) 49:22, (c) 5:22, (d) $50\frac{1}{2}$ to 22.

____ 5. The ratio of $3\frac{3}{8}$ to 1 is equal to (a) 42:24, (b) 81: 24, (c) $\frac{71}{9}$:24, (d) $72\frac{3}{8}$: 24.

UNIT II - SLOPERS

TEST II

PART I. Answer the following questions:

1. Discuss the relationship between patternmaking and designing, including the following points:
    a. The chief function of each.
    b. The ways in which each depends on the other.
    c. The ways in which each differs from the other.
2. What are the chief methods employed in patternmaking? How should they be used?
3. In draping a muslin bodice on a model form, list the four places where the grain should first be marked.
4. Define the word "draping."
5. List five markings which should be added to the basic sloper.
6. Give two specific uses for a basic sloper.
7. List three other names for the basic sloper.
8. List three methods for the development of patterns.
9. Give four contour lines that are important in the basic sloper.
10. List five different areas in the apparel field.

PART II.

With the fabric and model form given you by the teacher, drape and develop a finished oaktag sloper for the bodice front and back within the time allowed.

PART III.

Design a garment using:

1. Soft folds in the skirt.
2. Soft folds in the neckline area.

UNIT III - WAISTS

TEST III - A-E

PART I. TRUE - FALSE (Value 1 point each; total 10 points.)

____ 1. The underarm dart is always on a line with the bust point.

____ 2. The dart legs of a dart must always be equal in length.

____ 3. It is not important for front bodice parts in certain positions to taper toward the bust.

____ 4. Positions of the dart can be changed, but the amount of dart control cannot be changed without changing the fit of the garment.

____ 5. The length of the darts may be changed according to the size and type of garment produced.

____ 6. The French dart is usually placed in the middle of the side seam.

____ 7. All dart changes must be trued.

____ 8. The best "hang" to the fabric is determined by the distribution of the dart control.

____ 9. The dart-tuck is applied mainly to garments for the youthful figure.

____ 10. The development of fullness and multiple darts in a design can only be done by the waist dart.

PART II. MULTIPLE CHOICE (Value 1 point each; total 10 points)

____ 1. The function of the dart control is to
   a. sew a seam
   b. shape material to fit curves of the body
   c. give released fullness

____ 2. The pivotal point of the dart is the
   a. dart leg
   b. part that points toward the point of accent
   c. part that points directly to within the bust area

_____ 3. If the two waistline darts on each side of the bodice are placed parallel to the center front and to each other, it will create the impression of
   a. a smaller waistline
   b. no change
   c. a larger waistline

_____ 4. The final dart is shortened to
   a. give interest
   b. provide extra ease
   c. create longer lines

_____ 5. The garment size that uses the dart-tuck the most in design is
   a. teen
   b. petite
   c. misses
   d. half-size

_____ 6. The elbow dart is shortened to measure
   a. 1" to 1½"
   b. 1½" to 2"
   c. 2½" to 3"
   d. 4" to 5"

_____ 7. Because of the gentle slope of the back, a better fit will result if a pattern has
   a. no darts
   b. two shallow darts
   c. one dart
   d. three darts

_____ 8. To improve the fit of the back sloper there should be
   a. a dart at the underarm seam
   b. a dart at the neck
   c. one deep dart at the waistline

_____ 9. The fuller bodice is cut
   a. exactly as the sloper
   b. with no waist dart
   c. straight down from the underarm

_____ 10. On a size 14 garment, the back waistline dart should be shortened to measure
   a. 3"
   b. 4"
   c. 5"
   d. 6"

PART III. COMPLETION (Value 1 point each; total 20 points)

1. The basic dart is the ______________ dart.

2. Five bodice dart positions are (a) __________, (b) __________, (c) __________ (d) __________. (e) __________.

3. Two other names for the waist are (a)__________, (b) __________.

4. The four main types of waists are (a) __________, (b) __________, (c) __________, (d) __________.

5. The brief waist, shirred at the bustline, that cancelled the normal waistline was derived from the ____________ period.

6. The most popular way of dividing darts on the bodice produces darts in these two positions: (a) __________ and (b) __________.

7. Two reasons for dividing a dart are (a) __________ and (b) __________.

8. Three types of controls for giving fit and contour to garments are (a) __________, (b) __________, (c) __________.

PART IV. (Value 5 points each; total 15 points)

1. Make a freehand sketch of the bodice front and back slopers with all their markings.

2. Describe the French dart and tell what its outstanding features are.

3. What are the two methods of manipulating darts? Clearly explain each, using sketches to help you if you wish.

PART V. PERFORMANCE (Value 45 points)

Directions: Work out the following assignments using your quarter-scale sloper and pattern paper. Be sure to make all final markings on patterns. BE NEAT AND ACCURATE. (5 points)

1. Using your front-bodice sloper and pattern paper, swing the waist dart to (a) French dart, (b) center-front waist, (c) center-front bust, (d) armhole, (e) neckline.

2. Develop front-bodice patterns for the following divisions of darts: (a) waist and neck, (b) shoulder and waist, (c) waist and underarm. (10 points)

3. Develop front-bodice patterns with (a) two darts at the shoulder, (b) two darts at the waist, (c) 3 darts at the center front. (15 points)

4. Design three front bodices with multiple darts. (Be as creative as you like.) Develop the three front patterns. (15 points)

UNIT III - WAISTS

TEST III - F-I

PART I. TRUE-FALSE (Value 1 point each; total 10 points)

____ 1. Necklines, collars, and facings usually have $\frac{3}{8}''$ seam allowance.

____ 2. Where a seam is used as a substitute for the control dart, it falls across the high point of the body.

____ 3. The princess line can be developed only through the use of curved lines.

____ 4. Multiple darts and dart-tucks are used mainly for ease.

____ 5. A yoke is used only in the bodice section of a garment.

____ 6. The line of the princess bodice adds width to the figure.

____ 7. When designing styles with fullness it is best to have the fabric available for experimenting.

____ 8. In developing the princess line one can make use of most of the styling darts.

____ 9. In developing the simulated yoke pattern, the pattern is left in one piece.

____ 10. The slash-and-spread method can be used for developing fullness through the use of gathers.

PART II. MULTIPLE CHOICE (Value 1 point each; total 5 points)

____ 1. In semi-circular fullness the measurement that is added is
   a. the same at both sides
   b. no change on one side with fullness added to the other side
   c. on both sides with more on one side than the other

____ 2. A deep narrow yoke will create
   a. vertical eye movement giving length
   b. horizontal line movement giving width
   c. diagonal line movement giving interest

____ 3. The space between tucks varies and is determined by
  a. size range of garment
  b. fabric
  c. design to be created
  d. all of these
  e. two of these

____ 4. A fabric suited to a design with a back yoke is
  a. crepe
  b. broadcloth
  c. nylon chiffon
  d. dotted swiss

____ 5. In styling a bodice with vertical tucks, this dart is seldom used:
  a. the waist dart
  b. underarm dart
  c. French dart
  d. shoulder dart

PART III. MATCHING (Value 1 point each; total 10 points)

		Column A		Column B
____	1.	basque	a.	depth of pleat
____	2.	surplice	b.	midriff
____	3.	underlay	c.	stretch out
____	4.	pin tuck	d.	round
____	5.	ease	e.	closely fitted bodice
____	6.	torso yoke	f.	waist
____	7.	circular	g.	lap-over bodice
____	8.	bodice	h.	excess
____	9.	elongate	i.	top of dart
____	10.	pivot point	j.	of very narrow width

PART IV. PERFORMANCE (Value 75 points)

A. Design three bodices: (a) princess, (b) yoke front with tucking, (c) yoke back with pleating.
   1. Sketch complete design for each.
   2. Develop pattern for one. (15 points)

B. Draft the following bodice fronts (Fig. 149) using your quarter-scale sloper.
   1. Make a final pattern with all necessary grain-markings, notches, etc.
   2. Be sure all drafts and pattern pieces are style-numbered.
   3. Be NEAT and ACCURATE. (60 points)

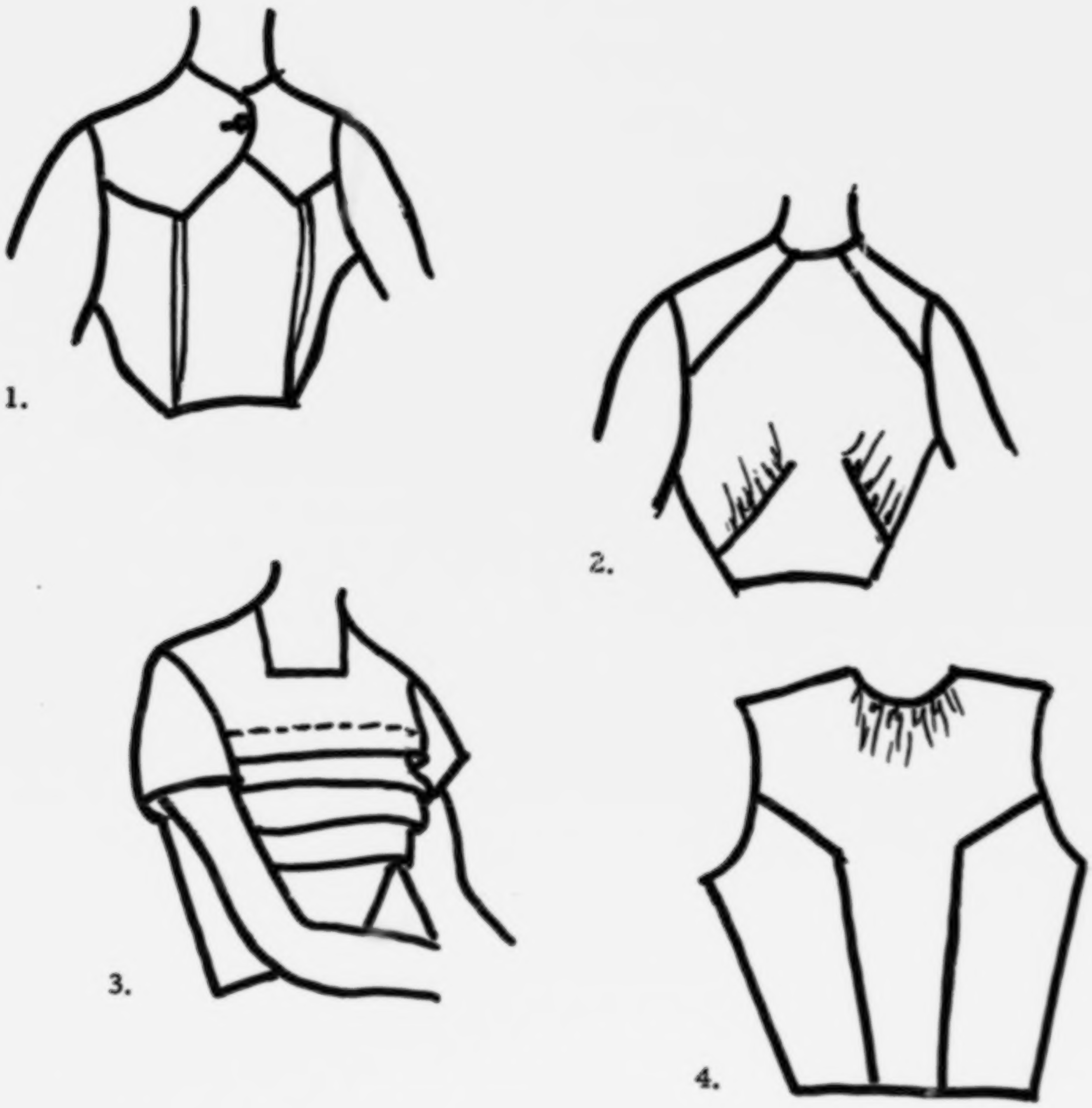


Fig. 149

UNIT IV - NECKLINES

TEST IV

I. Identify the following necklines:

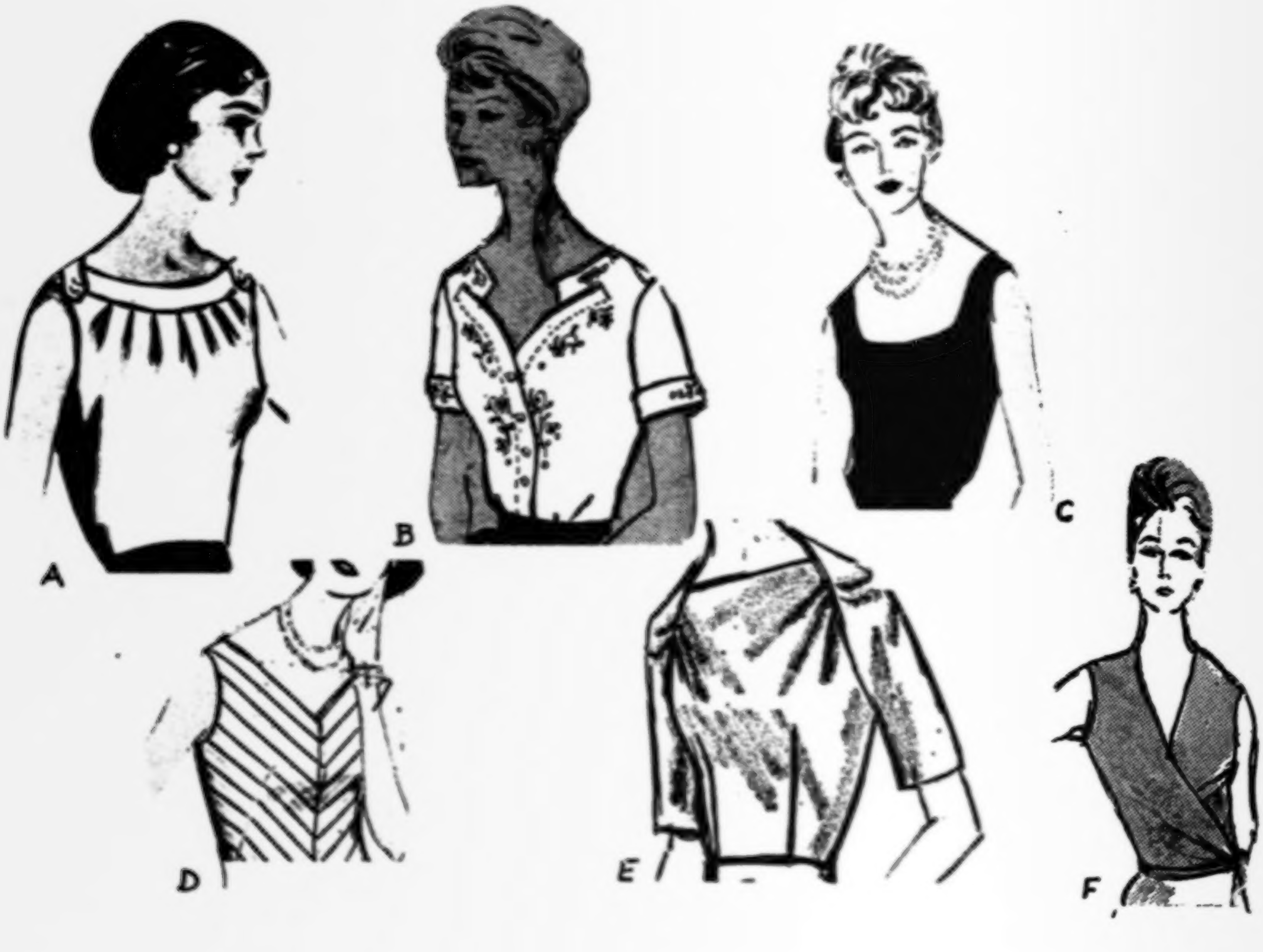
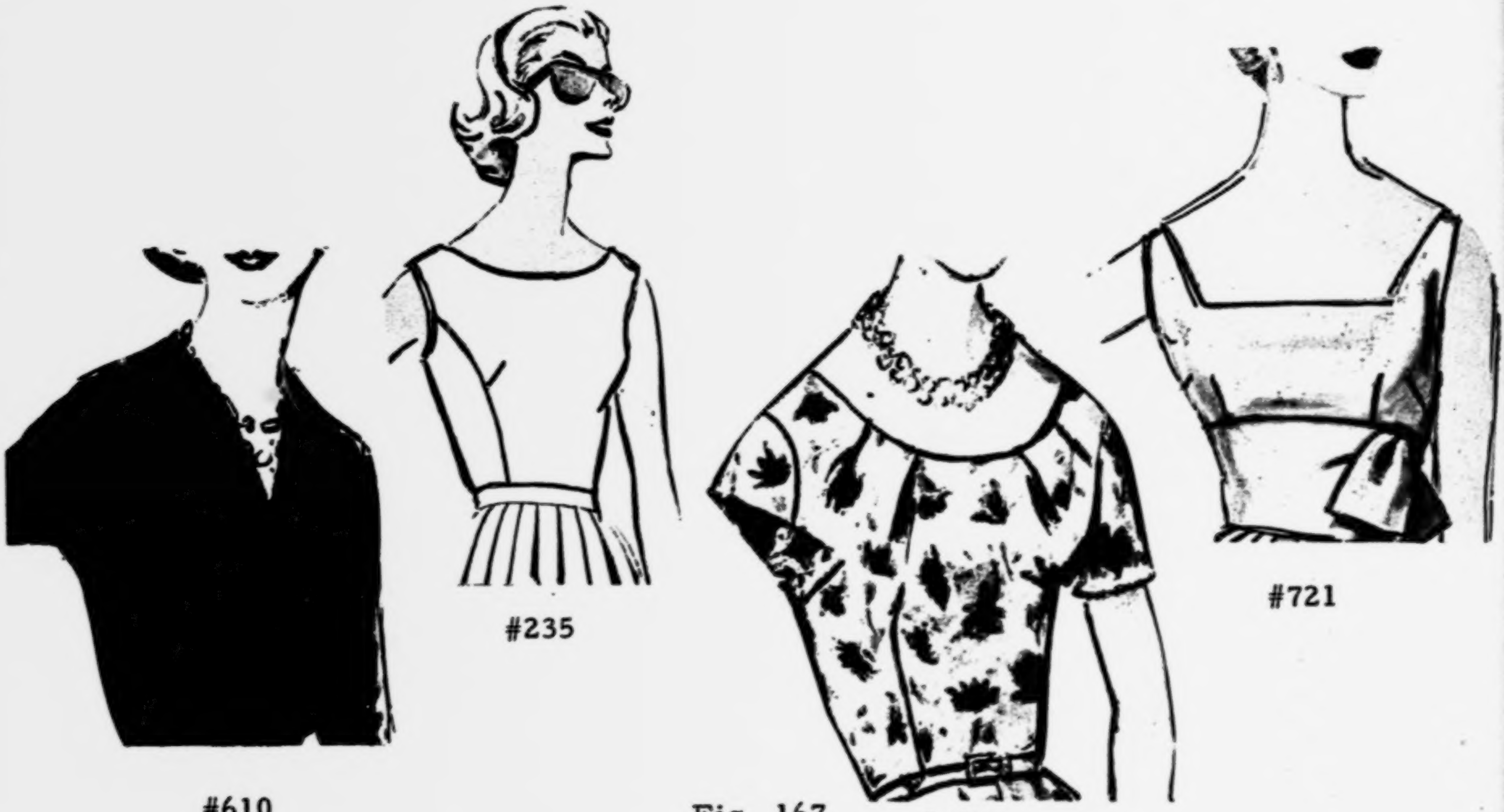


Fig. 166

II. Develop patterns for three of the following bodice fronts. Be sure to make complete front-bodice pattern, including facing.



#235

#721

#610

Fig. 167

#407

III. Working with the sketch on the right,
  a. Design and sketch the front pattern.
  b. Develop pattern for front and back bodice. (The back cowl is developed the same way as the front. Fullness can be any amount you desire.)

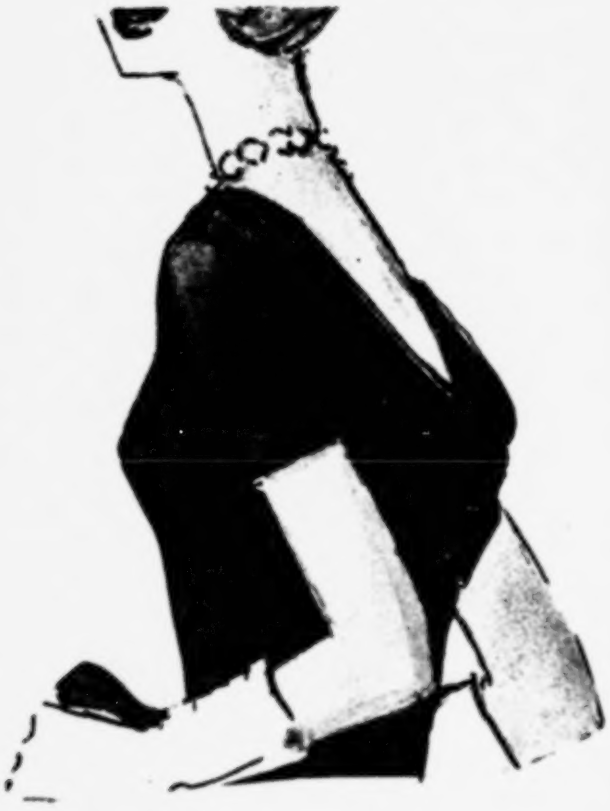


Fig. 168

UNIT V - CLOSINGS AND EXTENSIONS, FACINGS

TEST V

PART I - TRUE-FALSE

____ 1. The fiber content of lawn is linen.

____ 2. Pellon and interlon are both nonwoven fabrics.

____ 3. The grain of the facing should be perpendicular to the grain of the fabric at the garment edge.

____ 4. Women's clothes button right over left.

____ 5. Buttonholes start exactly at the center-front and extend to the right of the center, as the garment is worn.

____ 6. Interfacings are used to finish off raw edges.

____ 7. Interfacing is sewed to the wrong side of the garment.

____ 8. With a fabric such as chambray, the fabric itself is often its best interfacing.

____ 9. It is important that the interfacing should clean or launder like the fabric of the garment.

____ 10. Unbleached muslin is an interfacing in dressmaking.

PART II - COMPLETION

1. The areas of a garment where interfacings are usually found are:
   a. ____________ b. ____________
   c. ____________ d. ____________
   e. ____________

2. Two interfacings that are suitable for washable garments are ____________ and ____________.

3. Three interfacings that are suitable for garments that are to be dry cleaned are
   a. ____________ b. ____________
   c. ____________

4. The ____________ used in the garment determines the type of interfacing to use.

5. A stiff woven cotton that can be used for interfacing is ____________________.

6. The allowance made for closing garments is known as the ____________________.

7. If a flat button measures $\frac{1}{2}''$, the buttonhole should be at least ______.

8. If the button to be used measures $\frac{3''}{4}$, the extension should be ________.

PART III - MATCHING

		Column A		Column B
____	1.	facing	a.	facing cut separately from garment.
____	2.	bias facing	b.	fabric placed between garment and facing.
____	3.	applied facing	c.	fabric used to finish raw edge.
____	4.	attached facing	d.	facing that can be used on shaped edge.
____	5.	interfacing	e.	facing cut in one with the garment.

PERFORMANCE TEST

I. Develop the patterns, including the proper facings for the following front bodices.

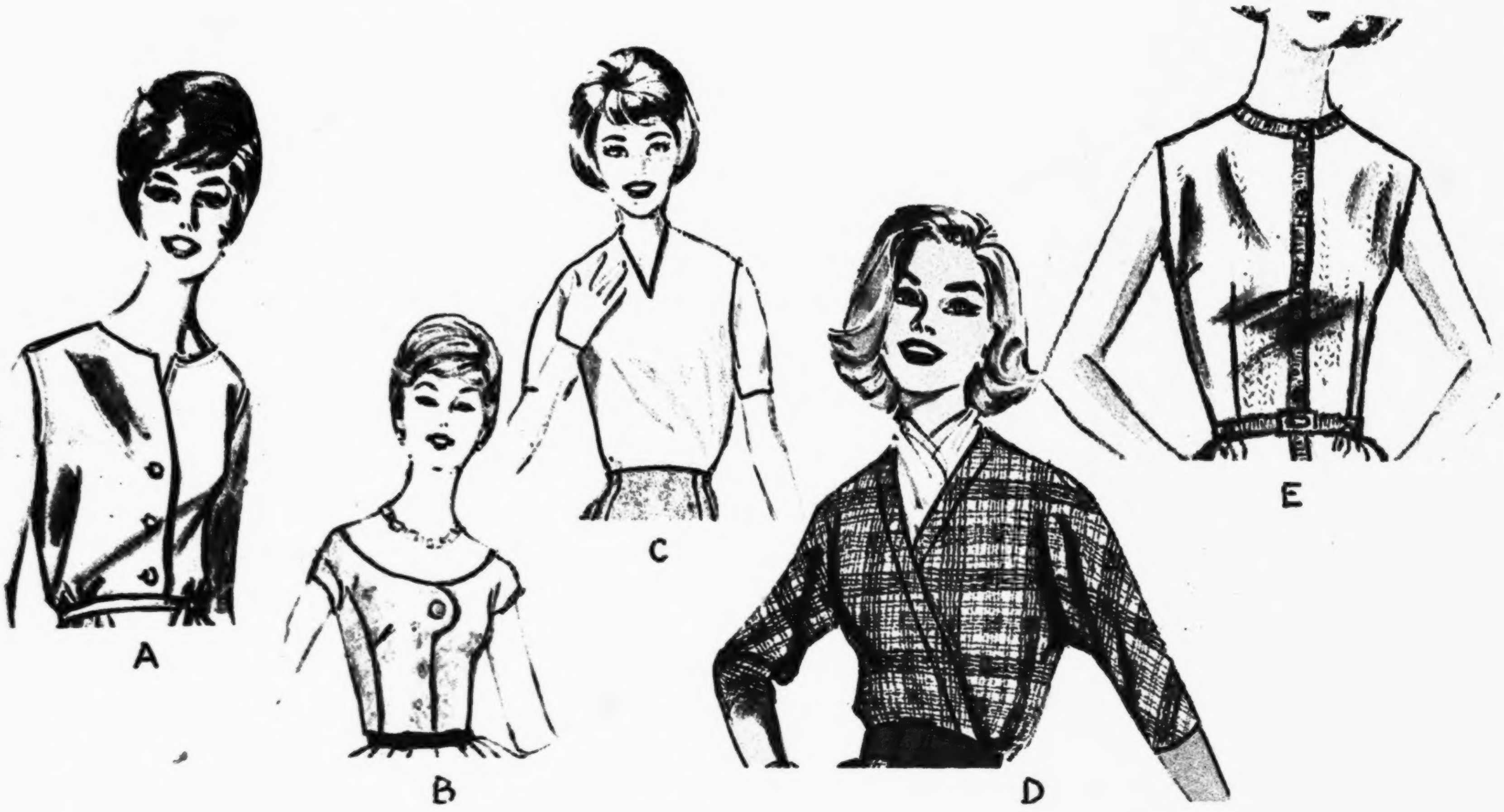
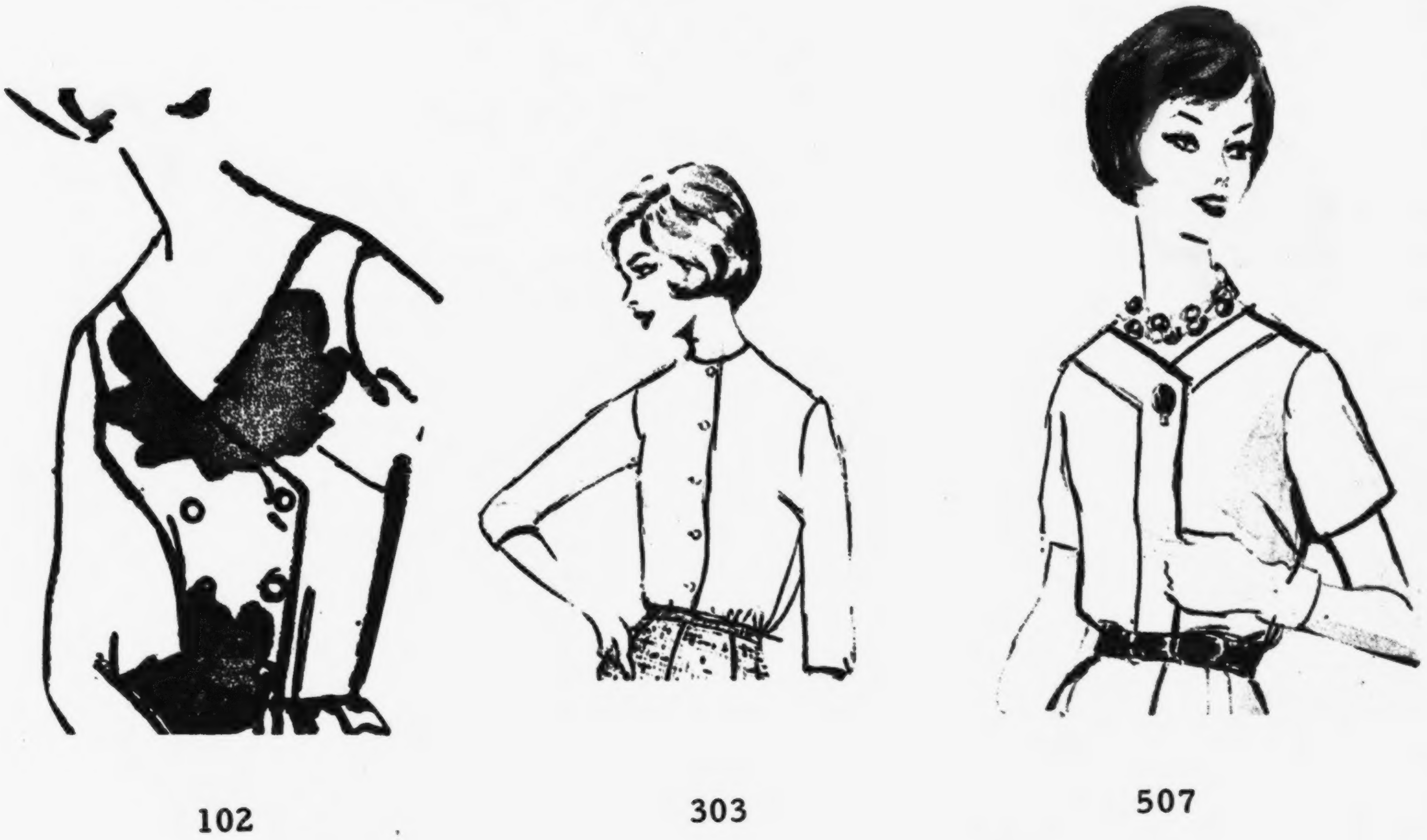


Fig. 180

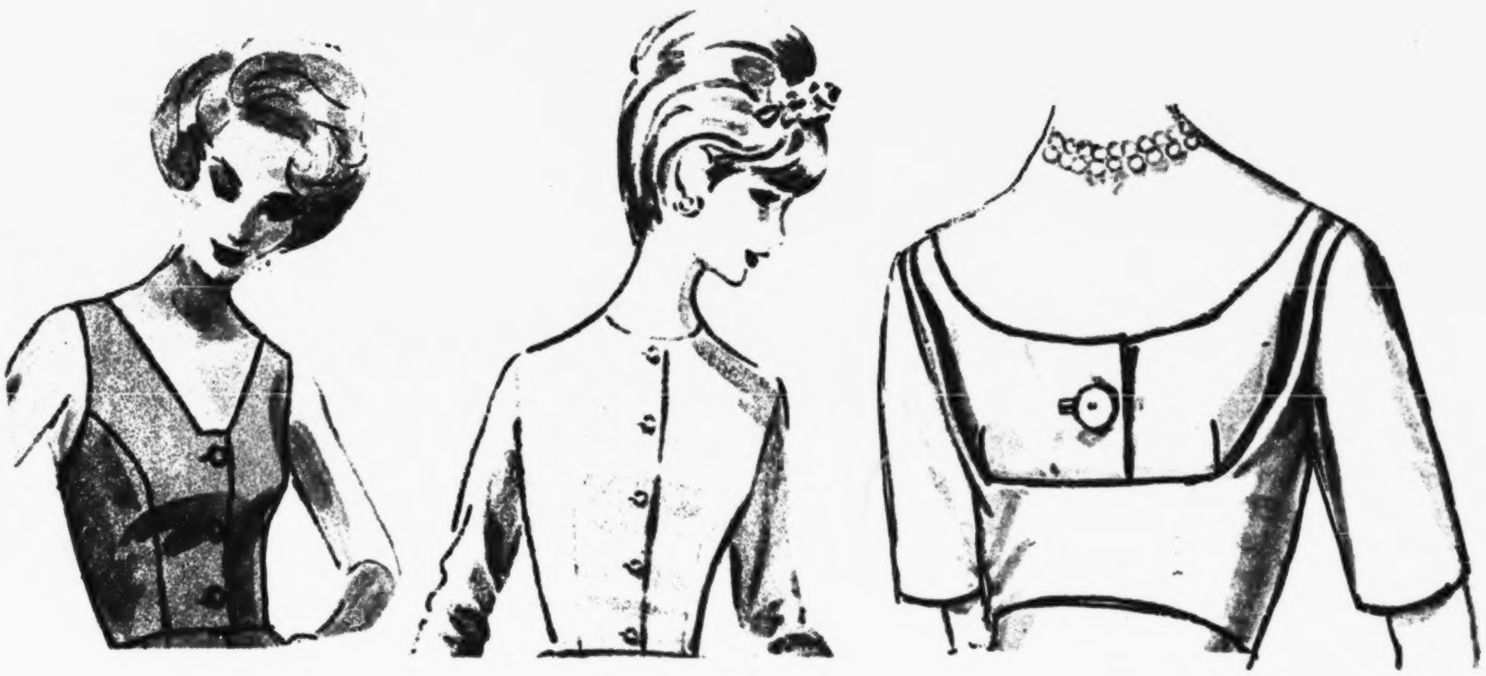
II. Develop the front bodice patterns for the following, complete with applied facings.



102 303 507

Fig. 181

III. Develop the following front bodice patterns, complete with attached facings.



A B C

Fig. 182

UNIT VI - COLLARS

TEST VI

PART I. TRUE-FALSE (Value 1 point each; total 10 points)

____ 1. If a collar neckline is a straight line, the collar lies flat.

____ 2. Collars need to be made of two pieces of fabric joined together.

____ 3. The stand collar, such as the Mandarin collar, has no roll-back.

____ 4. The neckline of the sloper does not have to be lowered when a garment has a collar.

____ 5. Seam allowance for the collar is the same as for the rest of the garment.

____ 6. In order to have collars roll correctly, the upper and under collars must be the same size.

____ 7. All collars are designed to be sewn into the garment permanently.

____ 8. The collar is important to the over-all look of the garment because it frames the face.

____ 9. The break point of the collar is where it is joined into the seam.

____ 10. Most collars overlap at the center-front.

PART II. COMPLETIONS (Value 1 point each; total 10 points)

1. The two major collar classifications are ________________ and ________________.

2. In figuring the amount of material for stand and roll, the ratio is _____ to _____.

3. Rolled collars are divided into two types: ________________ and ________________.

4. In drafting the straight collar, the important measurements are ________________ and ________________.

5. The collar classifications according to the roll are ______________, ______________, and ______________.

PART III. MATCHING (Value 1 point each; total 10 points)

____	1.	fit line	a.	outward curve
____	2.	stand	b.	deep collar falling softly from bodice neckline over shoulders
____	3.	shawl collar	c.	standing collar with corners folded down
____	4.	Peter Pan	d.	inward curve
____	5.	Bertha collar	e.	small round collar
____	6.	Mandarin	f.	neckline edge
____	7.	convex	g.	rise of the collar from the neckline to roll line
____	8.	convertible collar	h.	collar in-one with the garment
____	9.	concave	i.	stand-up collar
____	10.	wing collar	j.	collar to be worn open or closed

PART IV. PERFORMANCE

A. Develop three of the following front bodices along with the collars. (Fig. 196) (Value 20 points each; total 60 points)

   1. Make a final pattern with all necessary grain markings, notches, etc.

   2. Be sure all drafts and pattern pieces are style-numbered.

   3. BE NEAT AND ACCURATE.

B. Design three front bodices with collars and develop the pattern for one. (Value 10 points)

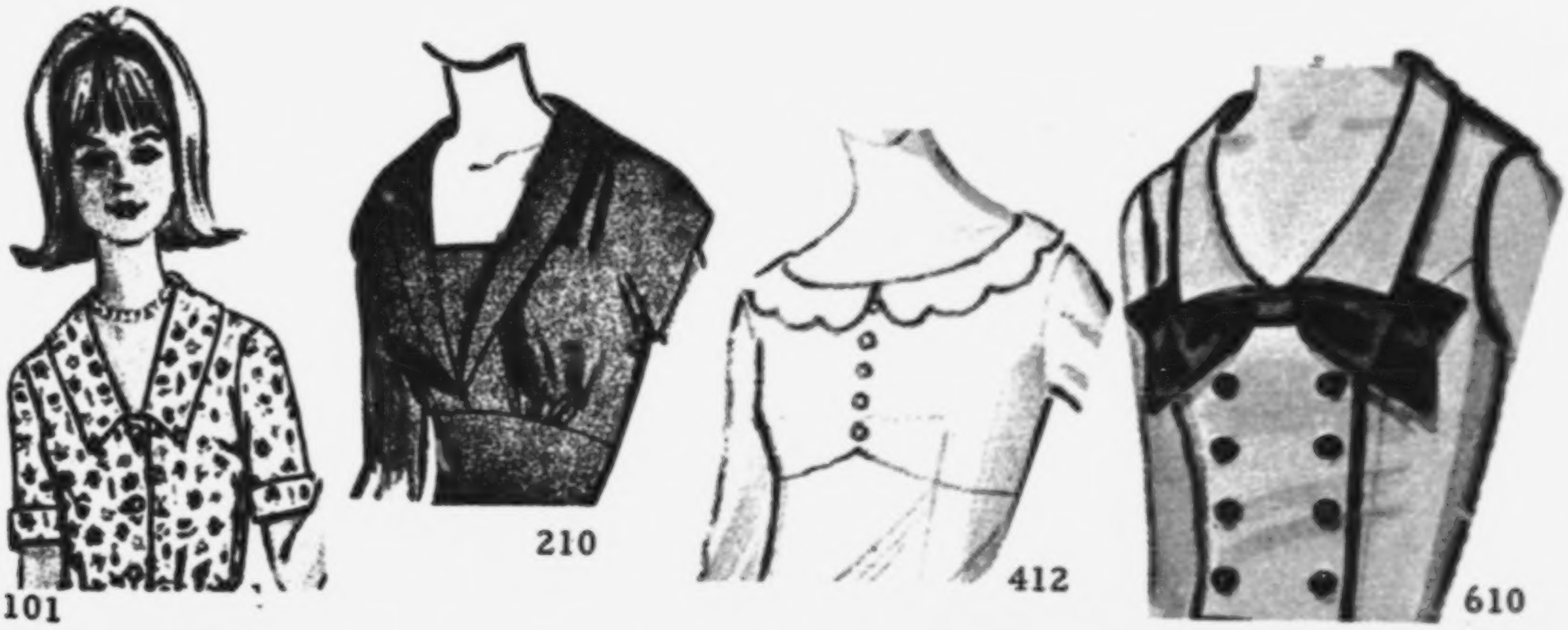


Fig. 196

UNIT VII - SLEEVES

TEST VII

PART I. TRUE-FALSE (Value 1 point each; total 10 points)

____ 1. The sleeve has little influence on the silhouette of a garment.

____ 2. Every sleeve must have a little ease.

____ 3. A type of mounted sleeve is the kimono.

____ 4. The bell sleeve is gathered into a cuff.

____ 5. The set-in sleeve is better fitting than the sleeve in-one with the garment.

____ 6. There is no need to change the basic single dart in the sleeve.

____ 7. The three-quarter sleeve generally ends between the wrist and the elbow.

____ 8. The bell sleeve is a short version of the kimono sleeve.

____ 9. To give more puff to a sleeve, width is added.

____ 10. To add circularity to a sleeve as in the bell sleeve, the slashing is from the bottom to top.

PART II. MULTIPLE CHOICE (Value 1 point each; total 10 points)

____ 1. One of the most youthful sleeves is
   a. kimono
   b. puffed
   c. raglan
   d. bishop

____ 2. The leg-o-mutton sleeve was popular in the
   a. 1920's
   b. 1700's
   c. 1890's
   d. 1940's

____ 3. Wide, full sleeves
a. add length to the figure
b. add width to the figure
c. do not change the figure

____ 4. The sleeve cuff needed for cuff-links is known as
a. band
b. French
c. shaped cuff

____ 5. The sleeveless or "bared" look became popular about
a. 1900
b. 1930
c. 1960
d. 1920

____ 6. The simplest design in the sleeve-in-one classification is
a. puffed
b. modified cap
c. dolman
d. kimono with gusset

____ 7. The kimono sleeve is best suited to
a. faille
b. tweed
c. crepe
d. taffeta

____ 8. The head of the sleeve is the
a. bottom
b. cap
c. mount
d. biceps line

____ 9. Fullness at the armhole directs the eye mainly to
a. the neck
b. waist
c. shoulder
d. bustline

____ 10. An expression of top width through the use of sleeves is
a. the raglan
b. the bat-wing sleeve
c. roll-up sleeve
d. kimono

PART III. COMPLETION (Value 1 point each; total 10 points)

1. The two sleeve classifications are ________________ and ___________.
2. The natural shoulder look returned in the year of _________.
3. The three areas that may change from year to year, causing changes in the sloper sleeve pattern are _______________, __________________, and ___________________.
4. The darted sleeve was popular in the year ________.
5. Three types of mounted sleeves are ___________, _____________, and ________________.

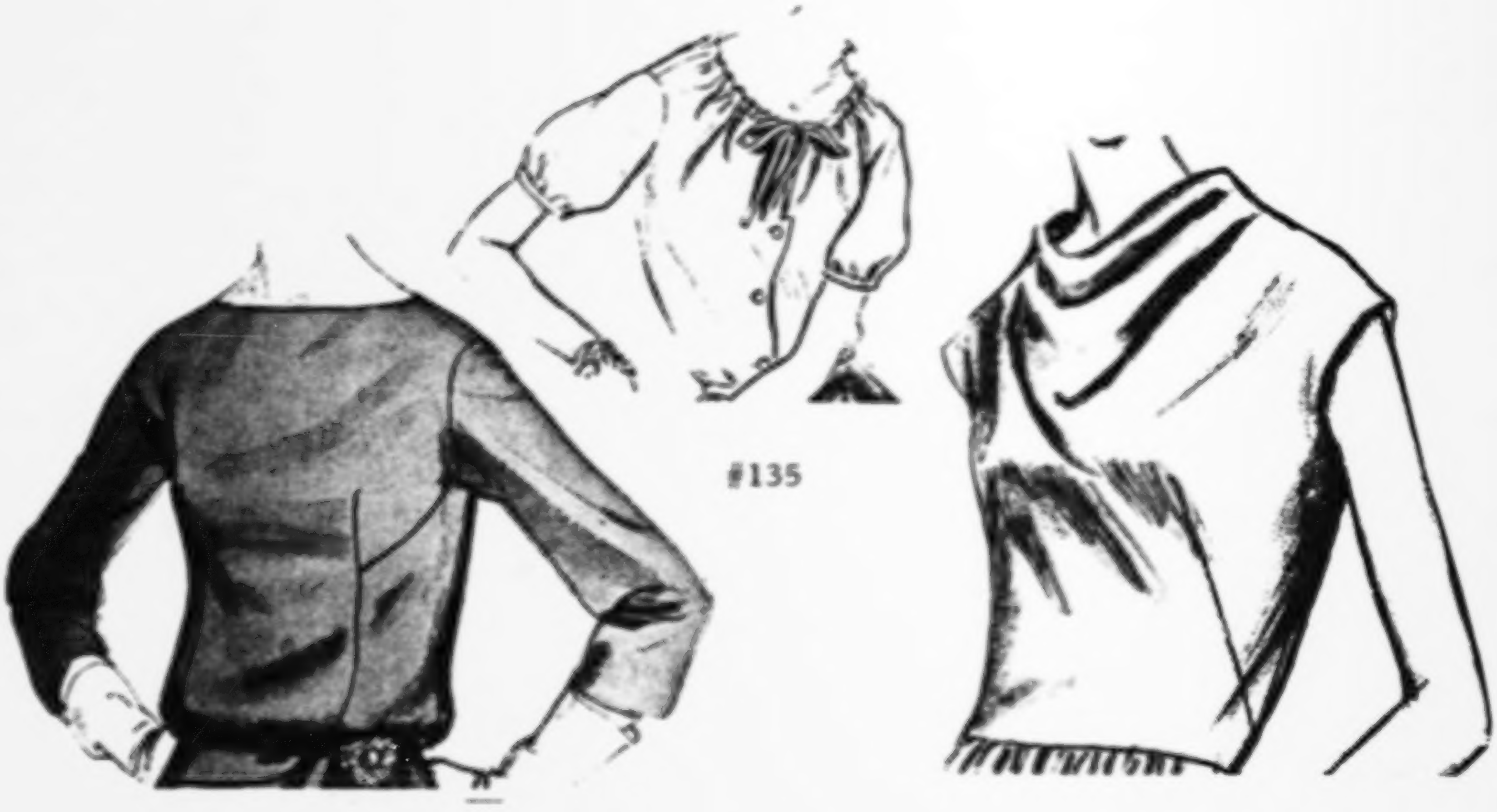
PART IV. MATCHING (Value 1 point each; total 10 points)

_____	circularity	a. short version of the kimono sleeve
_____	bell sleeve	b. additional material allowed for fit
_____	biceps	c. type of mounted or set-in sleeve
_____	silhouette	d. fullness that ripples
_____	puffed	e. large muscle in upper arm
_____	ease	f. sleeve that is all-in-one with the bodice
_____	drop shoulder	g. curved top of sleeve
_____	head	h. outline or contour of figure or costume
_____	cap sleeve	i. the cap of sleeve is part of the bodice
_____	kimono sleeve	j. similar to the bishop sleeve but free swinging

PART V. PERFORMANCE (Value 60 points)

Develop patterns for the following bodice fronts and sleeves, using your quarter-scale slopers. (Fig. 222.)

1. Make a final pattern with all necessary grain markings, notches, etc.
2. Be sure all drafts and pattern pieces are style-numbered.
3. Be NEAT and ACCURATE.



#135

#120

#164

FIG. 222

UNIT VIII - SKIRTS

TEST VIII

PART I. TRUE-FALSE (Value 1 point each; total 10 points)

____ 1. The silhouette of the entire costume is largely determined by the cut of the skirt.

____ 2. Heavier fabrics are usually made into very full skirts.

____ 3. The large-hipped person looks best in pencil-slim skirts.

____ 4. The dart at the waist of the skirt should match the dart in the bodice.

____ 5. The bell-shaped skirt has fullness at the waist but not at the hemline.

____ 6. In determining fullness in a skirt, the placing of the slash lines is not too important.

____ 7. A gore is the same as a panel in a skirt.

____ 8. Gores are not flattering to most figures.

____ 9. For a slim skirt the flare point starts at the hipline.

____ 10. In the development of a design with a circular skirt the fabric used should be of a firm weave.

PART II. MULTIPLE CHOICE (Value 1 point each; total 10 points)

____ 1. The sweep of the skirt is at the
   a. hipline
   b. hemline
   c. waistline
   d. midpoint between hipline and hemline

____ 2. The six-gore skirt will have
   a. seven seams
   b. five seams
   c. six seams

____ 3. The panel line should be drawn
a. the same width at top and bottom
b. wider at the top than at the bottom
c. wider at the bottom than at the top

____ 4. The narrower the center panel,
a. the fuller the figure appears
b. the slimmer the figure appears
c. the appearance is not affected

____ 5. For a full skirt, the flare point starts at
a. the hipline
b. the waistline
c. below the hip line

____ 6. The four-gore skirt is constructed by simply
a. cutting the pattern in half
b. shifting the dart control
c. dividing the basic sloper into two pieces

____ 7. If many slashes are made in the development of the circular skirt,
a. there will be just a few deep folds
b. the circularity will be gradual and hang in many folds
c. no folds will form

____ 8. The break point of the skirt is
a. the width of the hemline
b. the number of gores
c. where the fitted area of the skirt breaks away from the body

____ 9. The pencil-slim skirt is made
a. with darts the size of pencils
b. with seams added to the sloper
c. with slight fullness added to the bottom of the basic sloper

____ 10. In the development of the peg-top skirt, the slash lines are spread
a. at the hem only
b. at the waist only
c. from the waist to hem

PART III. COMPLETION (Value 1 point each; total 20 points)

1. Fullness can be added to the basic skirt with ____________, ____________, or ____________.

2. The width of the skirt should be based on ____________, ____________, and ____________.

3. In the development of the circular skirt, there are two methods: ____________ and ____________.

4. A skirt yoke is the fitted section from ____________ to ____________.

5. Wrap-around skirts come under the division of ____________.

6. Darts in the wrap-around usually correspond to ____________ lines or ____________.

7. Three skirt lengths are ________, ________, and ________.

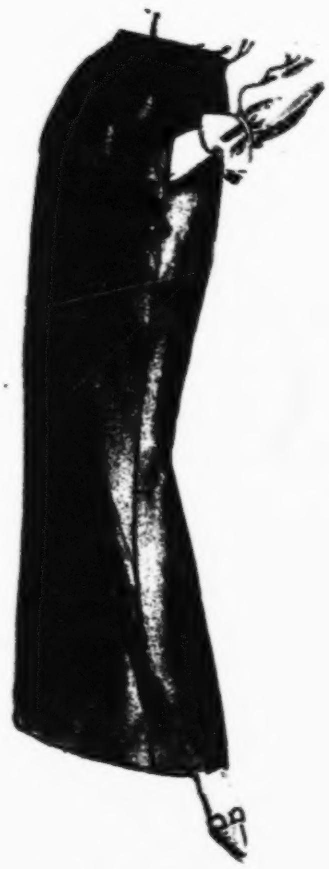
8. Three popular skirt silhouettes are ____________, ____________, and ____________.

9. The fullness or bulk of a skirt silhouette is called the ____________ of the skirt.

PART IV. PERFORMANCE (Value 20 points each; total 60)

Develop drafts and patterns for the following skirts using your quarter scale sloper.

1. Make a final pattern with all necessary grain markings, notches, etc.
2. Be sure all drafts and pattern pieces are style-numbered.
3. BE NEAT AND ACCURATE.



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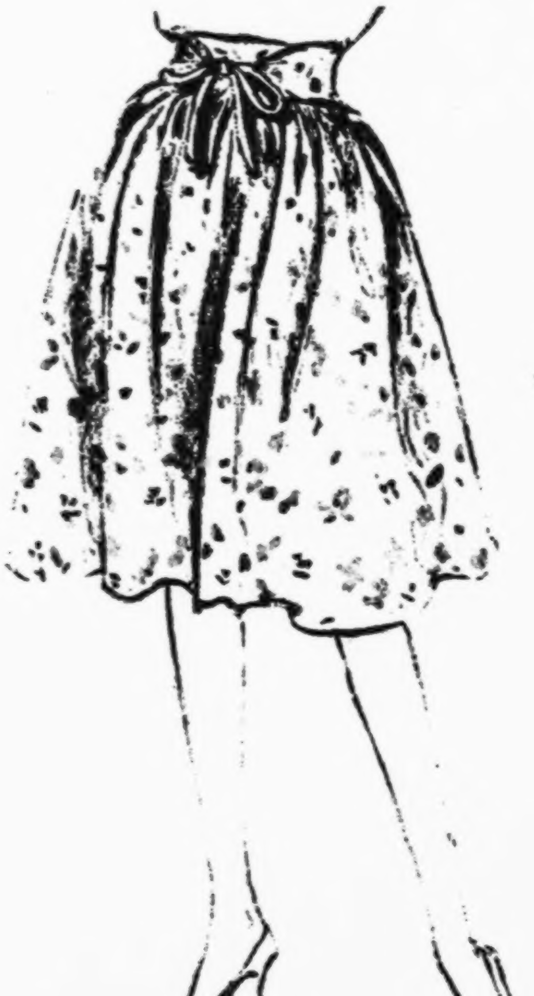

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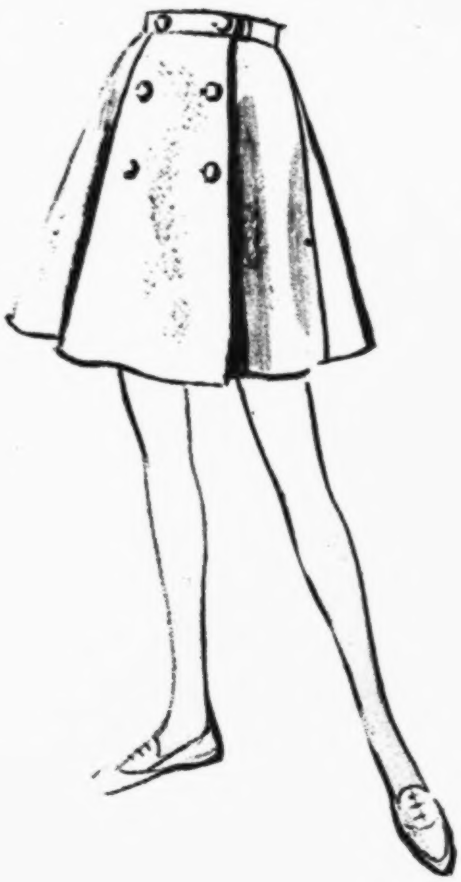

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